ARCHAEOLOGICAL EXCAVATION ON LAND AT STEPHEN'S WAY, SLEAFORD, LINCOLNSHIRE. (SWS 02)

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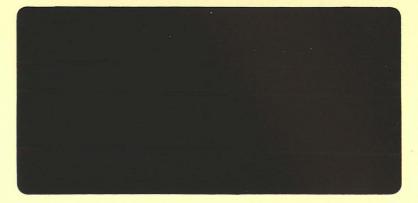


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A P S ARCHAEOLOGICAL P R O J E C T S E R V I C E S Conservation Services

2 0 KOV 2002

Highways & Planning Directorate



Event L13551 Source L18280 L18281 Mon L182622 62201 L182621 62200

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Work Undertaken For Persimmon Homes

October 2002

Report Compiled by Steve Thomson BSc (Hons)

Planning Application No: N/57/0916/99 National Grid Reference: TF 0735 4537 0745 4541 City and County Museums Accession No: 2002.342



A.P.S. Report No: 178/02

Quality Control

Stephen's Way, Sleaford SWS02

Project Coordinator	Steve Malone
Supervisor	Steve Thomson
Site Assistants	Chris Moulis, Pete Watkin, Natalie White
Surveying	Mark Dymond and Steve Thomson
Finds Processing	Denis Buckley
Illustration	Mark Dymond, Vicky Mellor and Steve
	Thomson
Photographic Reproduction	Sue Unsworth
Post-excavation Analyst	Steve Thomson

Checked by Project Manager	Approved by Senior Archaeologist
Aleve Steve Malone	Tom Lane
Date: 22-10-02	Date: 22-10-02

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1. SUMMARY

An archaeological excavation was undertaken on land at Stephen's Way, Sleaford, Lincolnshire. The site lies in an area of known archaeological remains and had previously been the subject of geophysical survey and archaeological evaluation.

The excavation revealed a series of features dating from the prehistoric to modern eras. An agricultural enclosure ditch of Middle Iron Age date was identified. Probable prehistoric ditches and pits were also recorded.

Romano-British boundaries, probably related to agricultural use of the land were cut by a series of undated field boundary and drainage ditches. Later and modern disturbance had caused truncation of the earlier features.

Environmental evidence gathered from the site indicated an area of open countryside, which was prone to seasonal flooding.

Although a limited assemblage, finds from the site included pottery dating from the Middle Iron Age to modern periods, a fragment of Anglo-Saxon masonry, animal bone, slag, a late medieval jetton, a quern fragment, flint flakes and a flint scraper.

No evidence of settlement in the immediate vicinity of the site was identified suggesting that the land had served an agricultural function for some considerable time. Continuity of this agricultural use was evidenced from the prehistoric to modern periods.

2. INTRODUCTION

2.1 Definition of an archaeological excavation

An archaeological excavation is defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, intertidal zone or underwater. The records made and objects gathered during the fieldwork are studied and the results of that study published in detail appropriate to the project design.' (IFA 1999).

2.2 Planning Background

was An archaeological excavation undertaken prior to development on land at Stephen's Way, Sleaford, Lincolnshire. Approval for the development was sought through the submission of planning N/57/0916/99 to North application Kesteven District Council. Permission was granted subject to Geophysical Survey and archaeological evaluation of the site (Rayner 1999). The evaluation revealed evidence of an Iron Age enclosure ditch. The area of the Iron Age enclosure was initially marked for preservation in situ. However, the final development layout would intrude into this area and the North Kesteven Heritage Officer agreed that preservation by record of archaeological deposits in the area which would be disturbed by the development was acceptable.

The archaeological recording was commissioned by Persimmon Homes and was carried out between 17th and 30th July 2002 by Archaeological Project Services (APS), in accordance with a specification designed by APS (Appendix 1) and approved by the North Kesteven Heritage Officer.

2.3 Topography and Geology

Sleaford is situated 27km south of Lincoln and 26km west of Boston in the North Kesteven District of Lincolnshire (Fig. 1). The town stands on the River Slea and its tributaries, which flow north-eastward to join the River Witham.

The area of investigation is located approximately 750m southeast of Sleaford town centre (Fig. 2, Plate 1), as defined by the parish church of St. Denys. The excavation comprised an area 30m long and varying from 6.5m to 15.5m in width, located in the southwest corner of the development site (Fig.3) The site is a grassed area of generally level land at a height of c. 13.5m OD, though in the southwest corner the land rises towards the adjacent Advanta Seeds buildings.

The site is centred on National Grid Reference TF 0735 4537 and is 3.7 hectares in extent. Local soils are of the Ruskington Association, typically gleyic brown calcareous earths developed on glaciofluvial sand and gravel (Hodge *et al.* 1984, 304). These soils overlie a solid geology of Upper Jurassic limestones and Oxford Clays.

2.4 Archaeological Setting

The modern town of Sleaford has developed over a number of archaeological sites dating from the prehistoric to the medieval periods, and the development site is surrounded by important archaeology.

Prehistoric remains have been found in close proximity to the area of investigation. A scatter of worked flint and two Bronze Age axe heads have been recovered c. 200m

south of the site.

Evidence for Iron Age settlement is recorded north and east of the development site. An excavation, undertaken c. 350m to the east of the site, revealed part of a substantial Middle Iron Age palisaded enclosure (Elsdon 1997, 30).

Excavations undertaken at a site 1km north of the development site in 1997 identified a Middle to Late Iron Age enclosure and associated settlement features. Scored Ware pottery similar to that recovered from the Stephens Way site was also recovered (Herbert, 1997a).

Excavations during the early 1960's and in 1984 and 1985, recovered evidence of a major Late Iron Age centre in the area now occupied by Old Place in Sleaford, only 400m northeast of the proposed development.

The largest collection of Late Iron Age coin pellet mould fragments found in northern Europe was discovered at the Old Place site and suggests the presence of a mint. The recovery of high status pottery and the possibility of a mint at the site has led to some speculation that the site represents an Iron Age oppidum, serving as an administrative centre for the Corieltauvi tribe who occupied the region during this period (Elsdon 1997, 75-76).

Romano-British remains occur across a large area to the east of the modern town. The Old Sleaford Iron Age site was succeeded by an extensive Romano-British settlement situated in a similar location. Excavations at the New Police Station, Boston Road, northeast of the development site revealed early to mid 3rd century structures, superseded by later buildings, which fell into disuse during the late 4th century (Herbert 1999). This was probably

part of the small Roman town that was situated astride the Mareham Lane Roman road, which runs in a south to north direction c. 350m to the east of the investigation area.

To the north of the site at The Hoplands, archaeological evaluation revealed extensive Romano-British remains and part of a cemetery dating to the $3^{rd} - 4^{th}$ centuries (Rayner 2001).

Excavations at a site 450m to the west of the development in the late 19th century recorded a Saxon cemetery containing more than 600 burials (Elsdon 1997, 11).

The former church of St. Giles, *c*. 450m to the northeast of the Stephens Way site, was probably founded during the Late Saxon period and became redundant during the early post-medieval period (Elsdon 1997, 43). A medieval manorial complex lies beneath Old Place, west of the former church. Evidence of ridge and furrow earthworks, also relating to the medieval period, has been located to the southeast of the site (Herbert 1997b, 2).

Old Sleaford was probably deserted at, or around, 1500 AD, and reverted to fields until post-war expansion of the town (Herbert 1999, 5).

Geophysical surveys of the development revealed linear and curvilinear features of archaeological origin. Subsequent evaluation of the site revealed Middle Iron Age, Roman, Late Saxon and Medieval ditches, gullies, post holes and pits, sealed by modern deposits (Rayner 1999).

3. AIMS

The aim of the archaeological investigation, as detailed in the specification (Appendix 1), was to ensure that any archaeological features under threat from the development in the specified area should be preserved by record and to determine their spatial arrangement, date, function and origin.

4. METHODS

The location of the excavation area was surveyed using a Geodolite. Vegetation and turf were cleared using a tracked, 360° mechanical excavator. Metal detection of the cleared area was undertaken to recover material which might assist in the understanding of the site. Soils were then removed, mechanically under archaeological supervision, using a 1.8m wide toothless blade until archaeological deposits were identified. This was achieved by removing 1.8m wide strips of approximately 10cm thickness. Spoil was regularly monitored and searched manually and by metal detector to retrieve and identify artefactual evidence, which might assist with the interpretation of the site.

Exposed features were then manually excavated. A minimum of 5% of the exposed length of features was excavated (Fig. 4). Additional dating evidence was sought from selected features by controlled sample excavation.

Environmental sampling was also undertaken (Appendix 7), targeting the Iron Age enclosure ditch, Romano-British ditch and undated features where relationships could not be fully elucidated.

Each archaeological deposit or feature revealed was allocated a unique reference number (context number) with an individual written description. A colour slide photographic record was compiled depicting the setting of the site and recorded deposits and features. Sections were recorded at scales of 1:10 and 1:20. A 5m grid was established and pre and postexcavation plans of each 5m grid square were produced at a scale of 1:20, detailing the position of recorded features.

Records of the deposits and features recognised during the investigation were examined, checked and cross-referenced to ensure a complete level II archive. A stratigraphic matrix of all identified deposits was produced. A list of all contexts, their interpretations and phasing appears as Appendix 2. Finds and environmental evidence were also examined (Appendices 3, 4, 5, 6, 7).

Phasing of the site was based on the nature of the deposits and recognisable relationships between them, supplemented by artefact dating where relevant (Appendices 3 and 4).

Archaeological contexts are described below. The numbers shown in bold and brackets are the context numbers assigned in the field.

5. RESULTS

Following post-excavation analysis, five phases were identified;

5.1 Phase 1 - Natural deposits
5.2 Phase 2 – Probable prehistoric and Iron Age deposits
5.3 Phase 3 - Romano-British deposits
5.4 Phase 4 – Post Romano-British deposits

5.5 Phase 5 - Modern deposits

5.1 Phase 1 - Natural Deposits

The earliest recorded deposit comprised a mottled yellow and brownish red sand and

gravel (114), which represented natural geological deposition. The deposit was exposed through the base of the excavation area between approximately 13m and 12.5m OD. The deposit was noted to slope gradually downwards to the north and east (Fig. 9).

5.2 Phase 2 - Probable prehistoric and Iron Age deposits (Fig. 5)

Located in the southern half of the excavation area were a series of pits. Pit (143) (Fig. 10 -section 4) was an irregularly shaped cut measuring 1.9m x 1.2m and 0.2m deep. The pit was filled with a mottled light brown and yellow clayey sand (142) containing moderate flint gravel and occasional pebbles and charcoal flecks.

To the north of (143) was a sub-circular pit (208) measuring 0.97m north-south and 0.86m east-west. The pit was filled with a mottled light brown, light reddish brown and white sand (207) (Fig. 10 – section 30), containing occasional charcoal flecks and angular gravel.

To the east of (208) was an irregularly shaped pit (210) (Plate 5, Fig 10 – section 31) measuring 1.8m southwest-northeast, by 1.2m northwest-southeast. The pit was filled with a mottled light brown and grey and reddish brown sand (209). Immediately north of (210) was a sub-rectangular pit (212) measuring 0.56 by 0.66m (Fig 10 – section 32). The pit contained a single fill of mid-greyish brown clayey sand (211) containing occasional charcoal fragments and moderate gravel.

In the southeast corner of the site was a partially exposed linear cut (148) measuring 1.1m wide x 1.14m long. The cut was interpreted as possibly representing the terminus of a small ditch and was filled

with a mottled light grey and reddish brown silty sand (147) (Fig. 10 -section 6, Fig 12 - section 5).

In the central area of the site a subrectangular pit (185) measuring 1.75mnorth-south x 1.27m east-west was recorded. The pit was truncated by a later Phase 3 ditch (Fig 10 – section 23) and was filled with a mid-brown clayey sand (184) containing occasional charcoal fragments, moderate gravel and patches of redeposited natural soils.

Also truncated by a Phase 3 ditch and located towards the north of the site was a linear feature (126) (Plate 3, Fig. 10 - section 14) interpreted as a ditch. The ditch measured 0.5m wide and 1.72m long and was filled with a mid-brown clayey sand (125) containing frequent gravel and occasional charcoal fragments.

Located in the northern half of the site was a partially exposed rectilinear ditch (173= 181=204). The ditch measured 0.1.1m wide, 0.4m deep and measured greater than 7m north-south turning east-west for over 3.5m. At its western extent the ditch contained a primary fill of mid-olive brown silty sand (162), sealed by a dark greyish brown silty sand (172) containing frequent small limestone fragments (Fig 11 - sections 17, 18, 20, 29). Further sections through the ditch identified a single fill of brownish grey silty sand (180, 203) (Figure 11 - section 25). Three sherds of pottery, animal bone, snail shells, burnt stone and iron working slag were recovered from (203) and animal bone was recovered from (172) and (180).

5.3 Phase 3 – Romano-British deposits (Fig. 6)

Cut into the Iron Age ditch (204) was an oval shaped posthole (187) (Fig. 11 - section 25) measuring 0.65m x 0.35. The

posthole contained a single fill of midbrown silty sand (186) containing occasional shell fragments and gravel. Animal bone and a single sherd of pottery of Iron Age date was recovered from the fill, though this was redeposited.

Two further postholes (169, 196) (Fig 12, sections 10 & 11, Fig. 13 – section 24), forming a north-south alignment with (187) were recorded. Posthole (196) was 0.63m in diameter and contained a single fill of dark brownish grey clayey sand (195). Measuring 0.64m x 0.38m, (169) contained a single fill of dark olive-greyish brown silty sand (168). No artefacts were retrieved from either posthole.

Both of the postholes appeared to be truncated by later ditches aligned broadly north south, but turning slightly towards the west at their northern extent.

earliest of the three ditches The (141 = 155 = 161 = 183 = 192)(Plate 2) measured greater than 30m long and was a maximum of 2.3m wide. Sections through the ditch revealed a generally dark to midbrownish grey silty sand or clayey sand (137, 154, 160, 182, 190) which formed the major fill of the ditch (Fig. 13). In the southern section through the ditch (Fig. 13 - section 24) a more complicated sequence of fills was identified. A primary fill of mid-greyish brown sandy clay (191) was sealed by (190). This in turn was overlain by a thin lens of mid-brownish yellow clayey sand (189) sealed by a final fill of mid-brown clayey sand (188). The absence of this deposit from other sections of the ditch may indicate a single episode of dumping of material as the ditch ceased to go out of use.

Finds recovered from the fills of the ditch included pottery of $2^{nd} - 3^{rd}$ century date, burnt stone, a saddle quern fragment,

animal bone, oyster shell, two flint flakes and snail shells. A single sherd of later postmedieval pottery was also recovered from (160), however this was intrusive and is likely to derive from the subsoil.

Also aligned north-south and curving west at its northern extent, was a further ditch measuring up to 1.1m wide and greater than 21m long (163=179=194=206). Sections through the ditch showed (163) and (194) cut the western edge of (161) and (192) (Fig. 13 – sections 15 & 24). In each section through the ditch a primary fill of generally mid-dark brown or olive-brown silty sand (165, 178, 193, 205) was recorded. A secondary fill of mid-brown silty sand (170) was recorded overlying (165) (Fig 13 – section 15).

To the and parallel west to (163=179=194=206) was a ditch, also oriented north-south though curving more sharply to the west at its northern extent (159=164=175=177=198). The ditch was a maximum of 1m wide and greater than 19.5m long. A mid to dark brown or olive brown silty sand formed a single fill of the ditch (158, 166, 174, 176, 197) (Fig. 13). Animal bone and iron working residue was recovered from (197). No positive stratigraphic relationship between the latter two ditches could be ascertained.

5.4 Phase 4 – Post Romano-British deposits (Fig. 7)

Located in the southwestern corner of the site, a posthole (152) measuring 0.52m in diameter was recorded (Fig. 14 – section 7). The posthole contained a packing fill of light brown clayey sand (153) containing frequent gravel, sealed by a mid-grey clayey sand (151).

To the east of the posthole was a linear pit (140) oriented east-west and measuring

1.5m long x 0.35m wide. The pit was filled with a mottled mid-grey and reddish yellow clayey sand (139) (Fig. 14 – section 3). The pit was truncated on its northern edge by a Phase 5 feature.

Three ditches, oriented northeast-southwest were recorded in the southern half of the site cutting across the Phase 3 ditches. Ditch (145) measured 1.3m wide, 0.32m deep and greater than 6m long. A mixed dark greyish brown and mid-reddish brown silty sand (144) formed the single fill of the ditch.

To the north of (145) were the truncated remains of two northeast-southwest oriented ditches. The ditches are likely to represent recuts of a single boundary. The precise relationships, in terms of continuations of the cuts could not be positively ascertained, though it appeared that the ditches intercut (Fig. 7).

Ditch (118=200) measured a maximum of 0.58m wide and greater than 15m long. A single fill of light brown clayey sand (117) to mid-brownish grey silty sand (199) was recorded (Fig. 14 – section 7, Fig 11 – section 26). Animal bone was recovered from (117).

Towards its western extent (118) truncated the southern edge of ditch (150). Measuring 2.5m long and 0.3m wide, the ditch was filled with a light brown clayey, gravelly sand (149). Representing a continuation of (150) a further, and heavily truncated, section of the ditch was recorded (157) (Fig. 12 – section 11). Filled with a midbrown silty sand containing frequent gravel (156), this section of the ditch measured 0.65m wide and greater than 7m long. A further continuation of the ditch was recorded towards the eastern edge of the trench (202). A mid-brown silty sand (201) filled this section of the ditch which also appeared to cut (200) (Fig. 11 – section 26), though this could not be positively proven.

5.5 **Phase 5 - Modern Deposits** (Fig. 8)

Sealing Phase 1 to 4 deposits, was a 0.34m thick, light brown clayey sand subsoil (138) containing moderate pebbles, coal and charcoal fragments and occasional ceramic building material fragments (Fig. 16 – section 33). Pottery dating from the 3^{rd} to 20^{th} centuries, burnt stone, animal bone and a flint scraper were recovered from the subsoil.

Cut into the subsoil and oriented northeastsouthwest was a ditch (120) measuring 1.18m wide x 0.39m deep and greater than 13.5m long. The ditch contained a primary fill of mixed dark greyish brown and mid reddish brown silty sand (146) sealed by a dark brown clayey sand (119) (Fig. 14 – section 2).

Also cut into the subsoil was a 0.24m wide posthole (214) (Fig. 16 - section 33) filled with a mid grey silty sand (213).

Cutting (120) (Fig 16 – section 33) and oriented in the same direction was a further ditch (116) (Fig. 14 – section 3). The relationship between the two ditches was not visible in plan, only in section. The ditch measured 1.05m long, 0.23m deep and greater than 17.6m long. A mid-brown clayey sand (115) formed the single fill of the ditch, from which iron nails, roof tile and clay pipe stem were recovered.

Sealing (116) and extending across the site, was a 0.2m thick dark grey silt topsoil (217). Animal bone, an iron nail, fired clay and 20^{th} century mortar were recovered from (217).

Towards the northern end and eastern side of the site, a series of linear cuts were recorded (128, 130, 134, 136). The cuts appeared to be extremely shallow and filled with a mottled black and mid-brown clayey sand containing patches of redeposited natural soil and frequent gravel (127, 129, 133, 135). The deposit appeared to represent a mix of topsoil and subsoils (Plate 7). On closer examination of the eastern section of the trench (Fig. 15 section 34) the probable line of a cut was identified below the topsoil relating to (128). It appeared that the features had been cut from high up the stratigraphic sequence and contained backfilled subsoil. The features were then recognised as probable seed testing trenches or beds and represented modern disturbance. An iron clench bolt was recovered from (129).

In the northern end of the site, a rectangular pit (122) was recorded backfilled with modern demolition debris (121).

Identified in the southern and western sections of the trench were a series of compacted dumped layers (123, 124, 215, 216, 218) (Fig. 11 – section 29, Fig. 16 – section 33) which appeared to represent dumping and levelling, probably related to construction of the adjacent warehouse building.

Overlying the dumped layers and extending across the entire site, was a 0.4m thick, dark blackish grey sandy silt topsoil (113), which represented the current ground surface. Pottery and ceramic building material dating from the 4th to 20th centuries, iron objects, glass, animal bone, a fragment of Saxon masonry, a snail shell and fired clay was recovered from the topsoil.

6. **DISCUSSION**

Prior to discussion of the individual Phases,

some general comments should first be made. A high degree of truncation of features of all Phases was apparent (Plate 3). Furthermore, the site appeared to have been levelled at some point as indicated by the interface between the subsoil and topsoil (Fig. 16 – section 33). This appeared to indicate stripping or levelling of the site at some point, resulting in burial of topsoil towards the southwestern corner of the site and subsequent redeposition forming the current ground surface. This is possibly connected to construction of the warehouse to the west and also may be related to seed testing work undertaken on the site.

The subsoil layer was also similar in nature to the fills of the features exposed and little differentiation was visible. However, the lenses of gravel noted within the subsoil and recorded in section 33 (Fig. 16), may indicate the level from which the earlier Phase 2 and 3 features were cut. This would suggest that the subsoil had undergone a degree of transformation. This is likely to have been caused by a combination of natural leaching of nutrients, agriculture and more particularly, the use of the site for seed testing in more recent times.

Generally, a degree of homogeneity in the fills of features of Phases 2, 3 and 4, likely to be a result of transformation of the soils, was noted, which made establishment of relationships between intercutting features by excavation difficult. Phasing of the site was largely a post-excavation exercise, the nature of which is more fully discussed below.

Natural geological deposition (Phase 1) was identified in the form of sand and gravel, forming a single deposit likely to be glaciofluvial in nature and laid down during the course of the last ice age. The deposit was noted to slope gradually from the southwest, downwards towards the northeast (Fig. 9). This appeared to create higher ground towards the location of the adjacent warehouses, a point also reflected in the modern topography.

A series of pits, ditches and an enclosure ditch formed Phase 2 features. The pits were concentrated in the central area of the site and sealed beneath the subsoil. One pit was clearly truncated by a Romano-British giving а secure stratigraphic ditch dating evidence or relationship. No relationship, other than with the subsoil, was identified for the other pits. However, the fills of the features were very pale in colour, suggesting leaching of the soil over time and the loss of organic content. This is probably indicative of a relatively early date, and probably earlier than the Middle Iron Age ditch.

No specific function could be assigned to the pits but it is possible that they represent refuse or waste pits, perhaps indicating occupation in proximity, though this can only be tentatively suggested.

The remains of two small ditches were also recorded. The most southerly of the two was phased based on the similarity of the fill to the pits previously discussed, as no dateable material was recovered. Moreover, the limited exposed extent of the feature does not preclude its interpretation as a pit, though a terminus to a ditch is more likely.

The second ditch was heavily truncated and cut by a Romano-British feature providing a stratigraphic relationship. The likely function for both of the features was as boundary and drainage ditches. If these are contemporary they perhaps form part of a larger field system.

The only securely dated prehistoric feature was the rectilinear enclosure ditch, previously identified during the evaluation of the site. Pottery retrieved from the ditch fill provides a Middle Iron Age date (400-150BC).

The relationship of the ditch with the topography of the site would seem to indicate that it was located to the edge of slightly higher ground (Fig. 9). Environmental samples obtained from the ditch (Appendix 7) provide molluscan seasonally evidence of wet, open countryside, with occasional standing water in the base of the ditch. Its location therefore, on slightly higher ground, is of relevance, creating a specific enclosure on what was probably drier ground.

The specific nature of the enclosure should be addressed. In general there was a dearth of finds from the ditch, though only a small length was exposed and excavated. The finds recovered from the ditch fills (pottery, burnt stone, animal bone, slag) are all indicative of human activity in the area. Furthermore, the environmental sampling indicated a low density of burnt remains in the fills, possibly deriving from a hearth or a discrete deposit of refuse. This would tend to suggest domestic occupation. However, the low density of material would indicate that domestic refuse dumping was not occurring to any great extent and that the majority of the material recovered resulted from general accumulation in the ditch.

It is most likely that the enclosure formed a paddock or field, perhaps for livestock, with settlement evidence perhaps located further to the west and southwest on higher and drier ground.

Environmental sampling provided limited evidence of agriculture in the area during the period. Cereals such as oat and wheat were being grown, with tentative evidence of processing of crops indicated through burnt chaff. Industrial evidence was limited to the recovery of slag. Tap slag was positively identified indicating iron smelting, with other undiagnostic fragments also recovered. However, finds of metalworking residues are common to most sites of the period and the low density of material recovered does not suggest a primary iron working site in the immediate vicinity.

Phase 3 deposits were represented by a series of postholes and ditch cuts. The larger of the three ditches was that identified as Late Saxon during the evaluation.

The postholes were of like dimensions and contained broadly similar The fills. alignment of the three identified postholes was north-south and was generally similar to that of the ditches recorded, which appears more than coincidental. It is possible that they represent the first Phase of Romano-British activity, establishing a boundary, which was superseded by later ditches. This would require further postholes to be present in unexcavated sections of the ditches, which remains a possibility given the homogeneity of the fills and the fact that the excavated postholes were not visible in plan.

The relationship between the orientation of the Romano-British boundaries and the topography of the site is of particular interest. It would appear that the boundaries define the higher ground to the southwest of the site, a point noted in relation to the location of the earlier Middle Iron Age ditch.

The molluscan evidence recovered from sampling indicates that the environment remained largely the same from the Iron Age through to the Romano-British period, predominantly open grassland, seasonally wet, though with higher levels of water in

the base of the large ditch. This may indicate that the Phase three ditches, located towards the higher ground, represent drainage of the site. The evidence of small gullies and ditches, identified during the evaluation, in the centre and east of the investigation area, may suggest an area of enclosed fields, with the ditches recorded during the current excavation representing drainage boundaries and the western extent of the site. Furthermore, given the high degree of truncation of features on the site, the larger of the Phase 3 ditches must be regarded as a substantial boundary ditch, possibly delimiting the western extent of a landholding or field system.

Artefactual evidence recovered from the fill of the large ditch was limited consisting of 11 sherds of pottery, a quern fragment, flint flakes, burnt stone and animal bone. Whilst the material is domestic in its nature, the pottery showed signs of abrasion, probably caused by ploughing and it is likely that the material has derived from the known settlement to the north and east and represents manuring scatters. The flint flakes are likely to be residual.

Phase 4 was represented by ditches, a pit and a posthole. The single pit and posthole are largely uninformative though they do provide evidence of activity. The ditches were aligned northeast-southwest, in stark contrast to Phase 3. This would suggest that known field boundaries and patterns had long since gone out of use, and were replaced along new alignments.

However, a large gap exists between the end of the Romano-British period and securely dated Phase 5 activity, a period of some 1300 to 1400 years. Medieval plough furrows were recorded during the evaluation, aligned northeast-southwest (Rayner 1999) which may suggest an approximate time for the change in the orientation of boundaries on the site. Furthermore, the Phase 4 features are at an angle to the railway line and present site boundary to the south, suggesting they predate construction of the railway. Whilst no positive dating can be assigned to Phase 4 features, it is suggested that these are of medieval or post-medieval date.

Modern activity was primarily defined by truncation of the site, through levelling, dumping and recent seed testing. Artefacts recovered from the subsoil deposit dated from the Prehistoric and Romano-British period to modern times, indicating a continuity of use. Pottery included a sherd of early to middle Saxon, medieval and Romano-British sherds.

No Saxon features were identified and only a single sherd of Saxon pottery was recovered. It is possible that the site was not occupied during this period and existed as marginal, seasonally flooded or marshland. The land may have been confined to peripheral activities at this time or as pasture. However, the proximity of the Anglo-Saxon cemetery to the west may be significant, with settlement and activity avoiding this area at the time.

Of particular interest was the recovery of a fragment of Saxo-Norman masonry from the topsoil, which is likely to have derived from the location of the nearby Saxon church of St. Giles.

7. CONCLUSIONS

Archaeological investigations were undertaken on land at Stephen's Way, Sleaford, Lincolnshire, as the site lies in an area of known archaeological remains.

Excavations revealed agricultural use of the site from the Middle Iron Age to modern

periods. Probable prehistoric refuse pits were recorded and tentatively suggest settlement during the period in the vicinity. Two ditches of a similar date also indicate possible agricultural use of the site during this time.

A Middle Iron Age enclosure ditch was identified cut into slightly higher ground to the west of the site and was likely to form a paddock or agricultural enclosure, possibly for livestock. It is likely that settlement connected with the enclosure occurred to the west and southwest of the site.

Romano-British field boundaries, possibly forming part of a field system extending eastwards provided evidence of continuity from the Iron Age. A hiatus in use of the land appeared to have occurred at the end of the Roman period, with subsequent changes in the orientation of field boundaries occurring perhaps during the medieval period.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Mr Bruce Gibbs of Persimmon Homes, who commissioned the fieldwork and postexcavation analysis. The work was coordinated by Steve Malone, who jointly edited this report with Tom Lane. Dave Start permitted access to the parish files and library maintained by Heritage Lincolnshire.

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10. ABBREVIATIONS

- APS Archaeological Project Services
- IFA Institute of Field Archaeologists

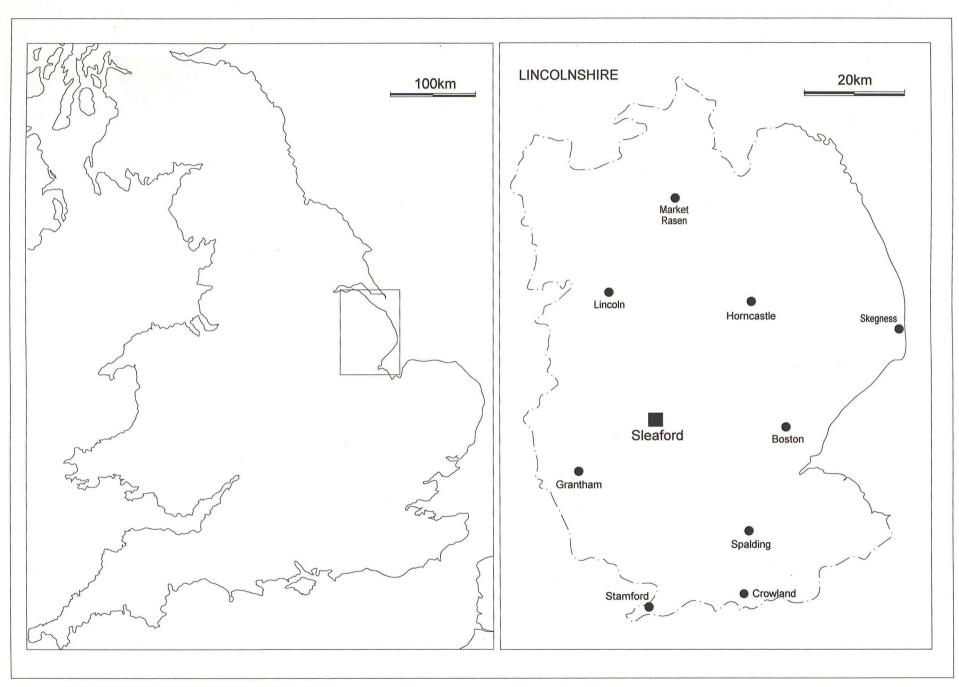


Figure 1: General Location Plan

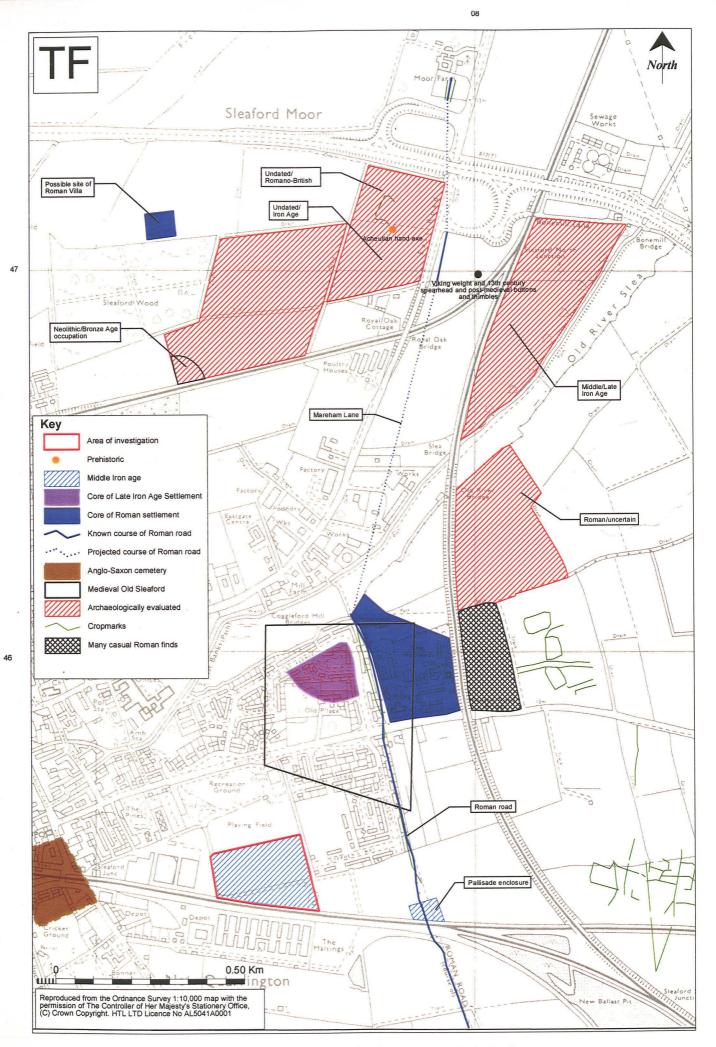
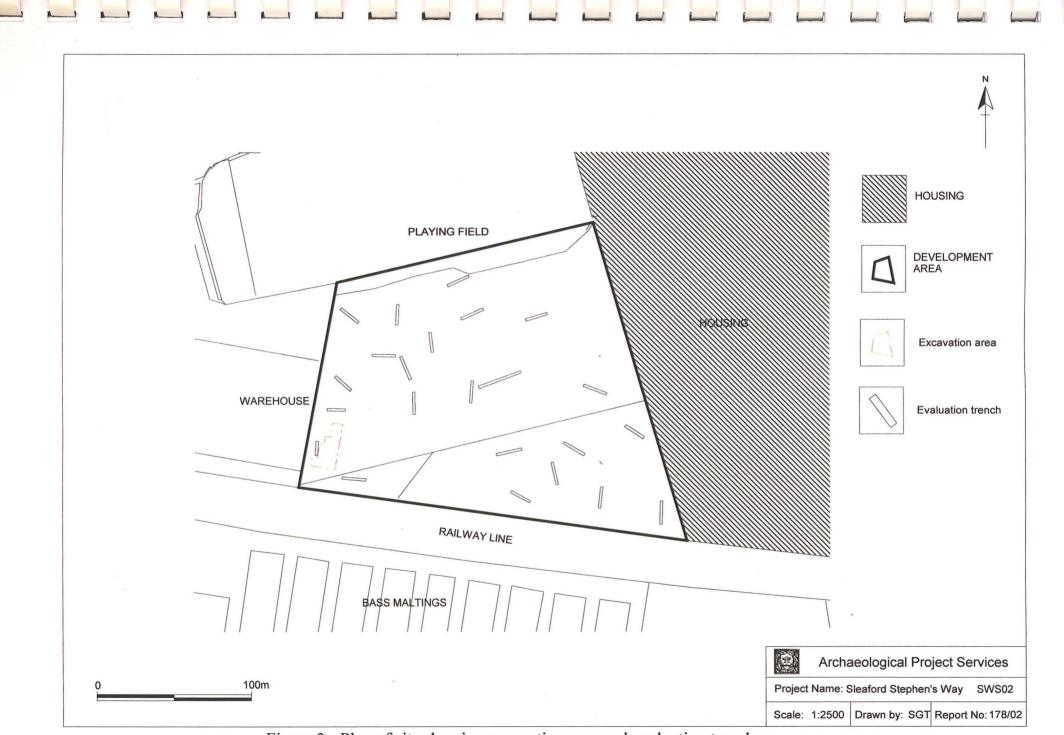
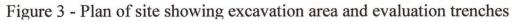
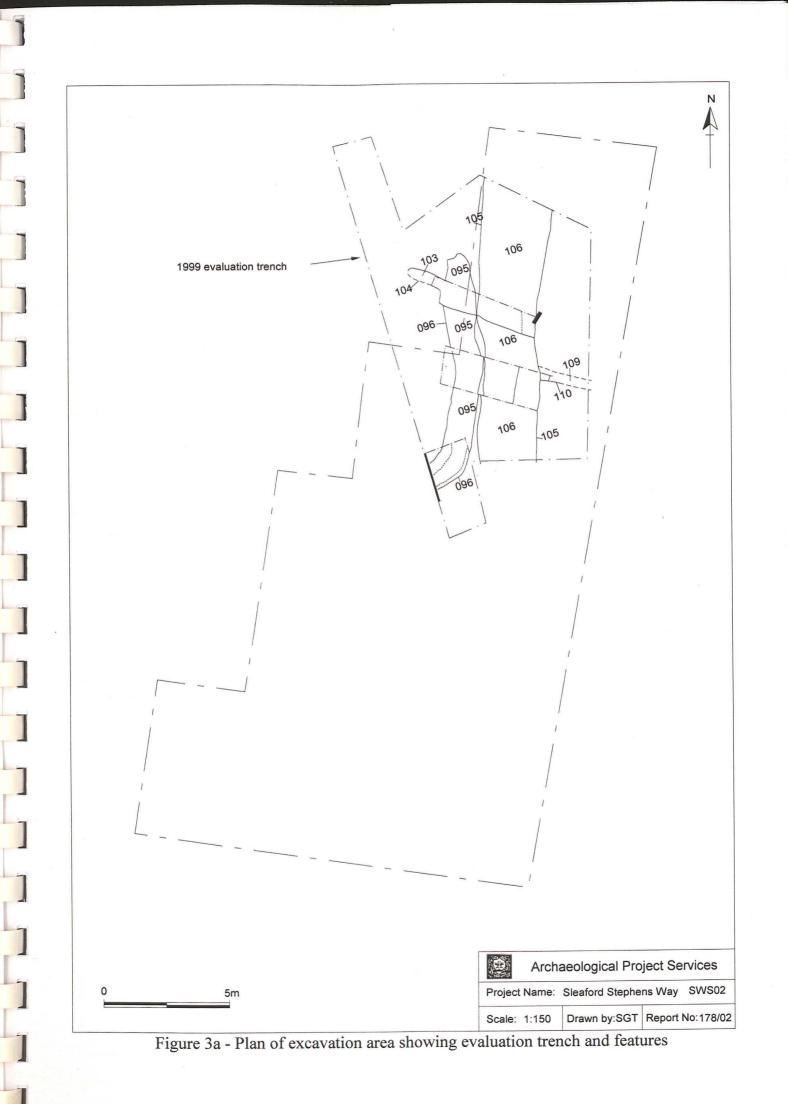


Figure 2 Site location plan showing archaeological setting







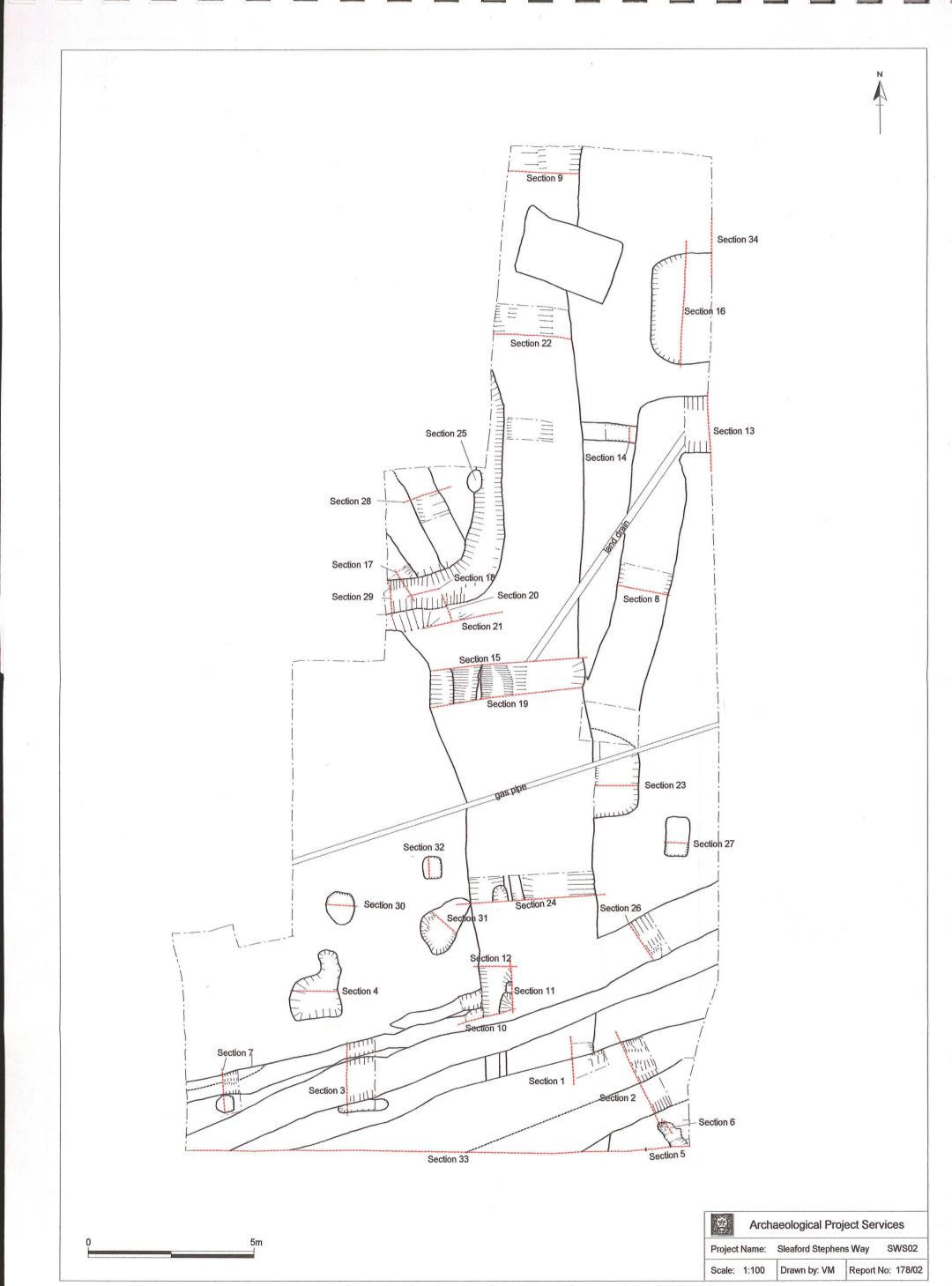
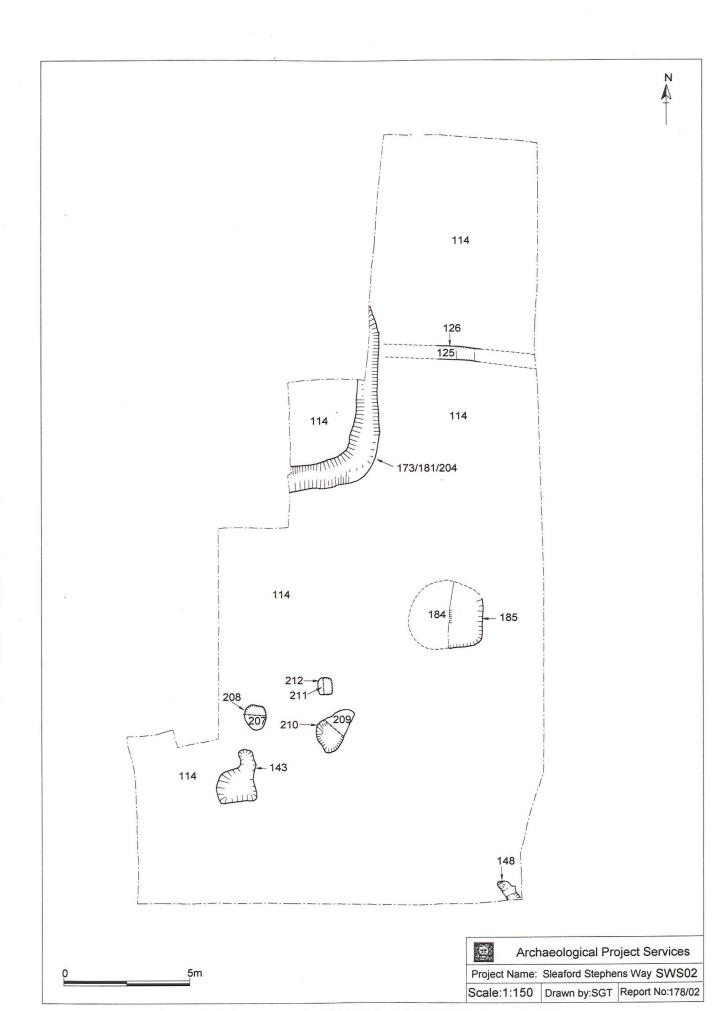
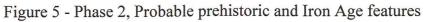
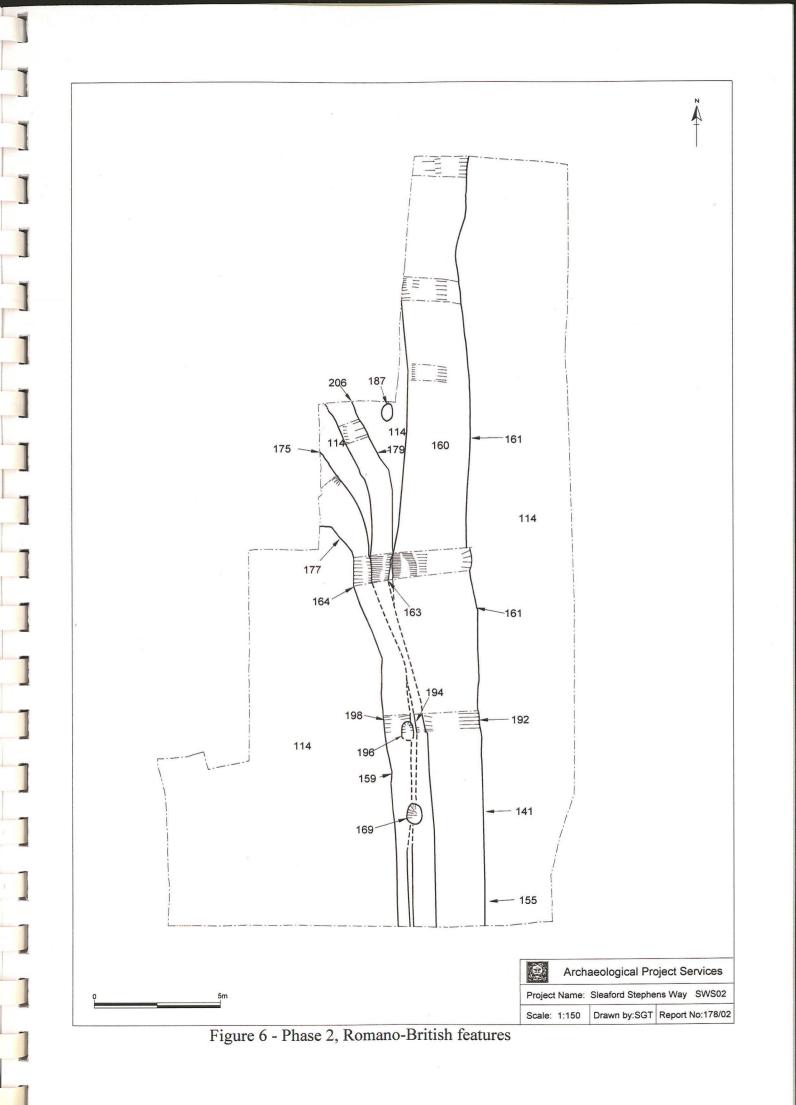
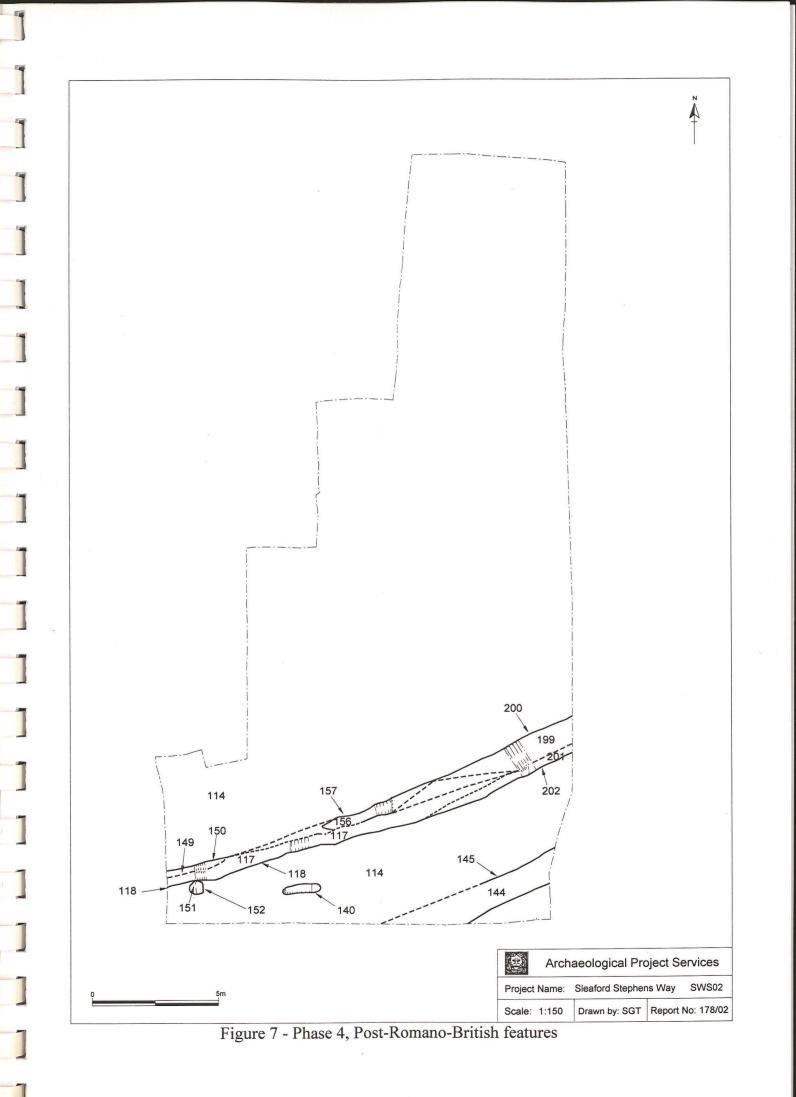


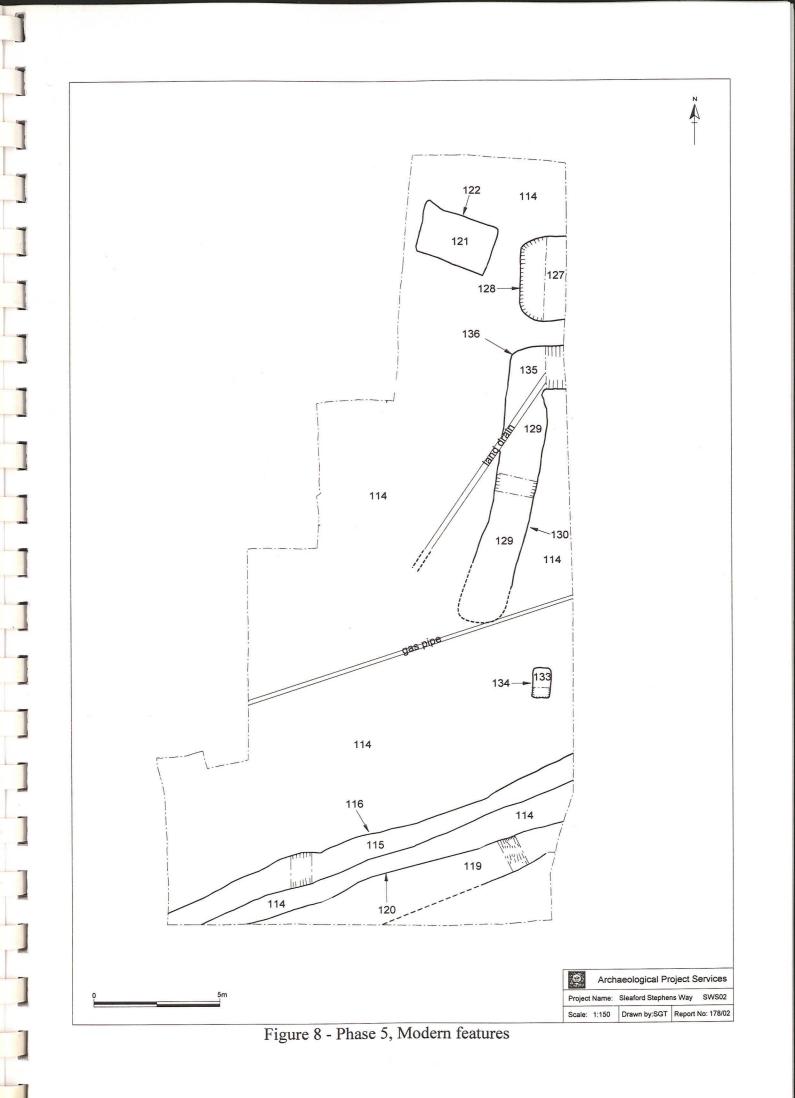
Figure 4 - Site plan showing excavated area and section locations

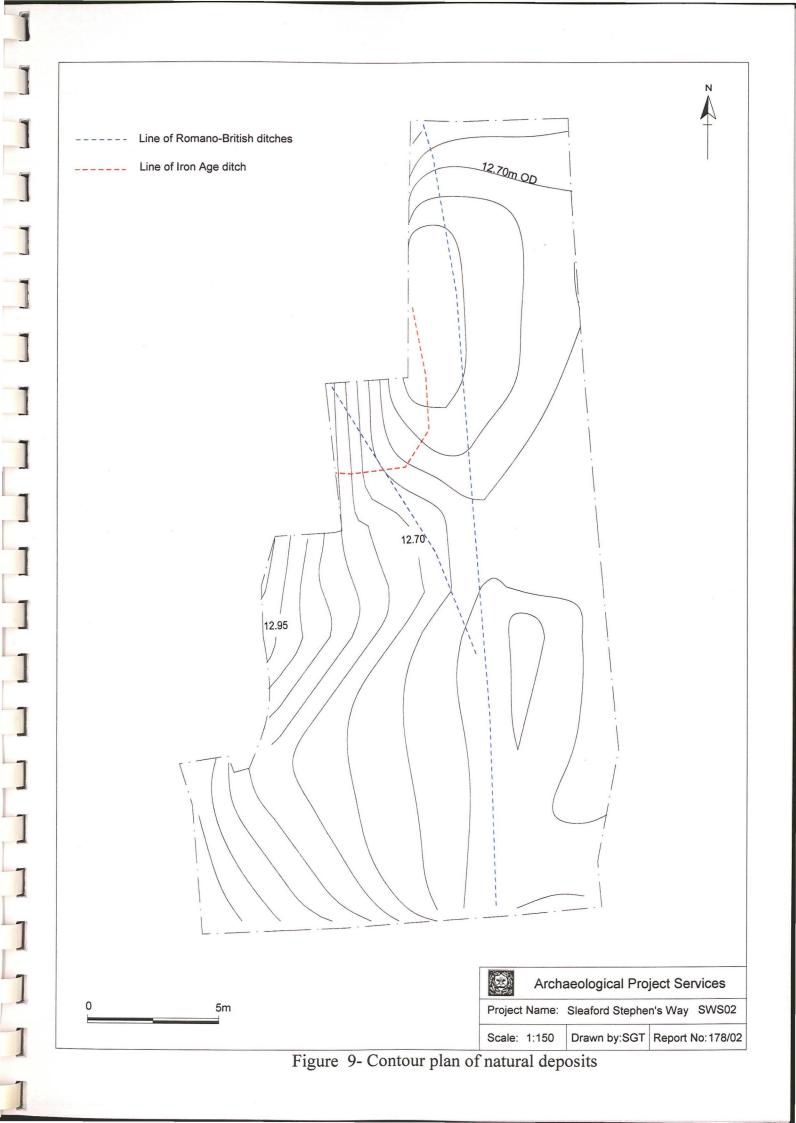












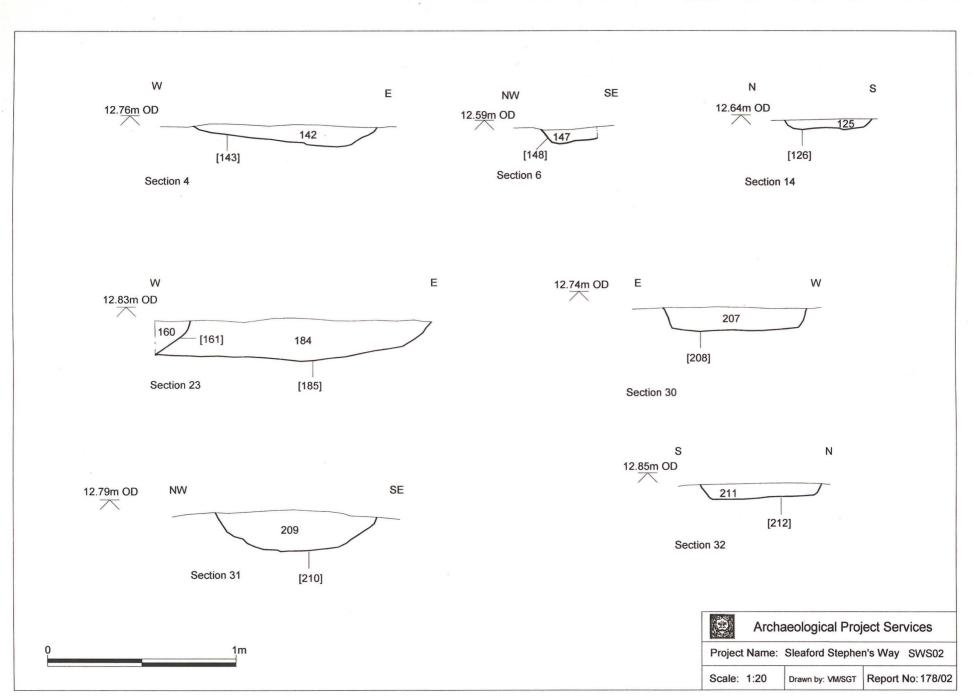


Figure 10 - Sections 4, 14, 23, 30, 31, 32

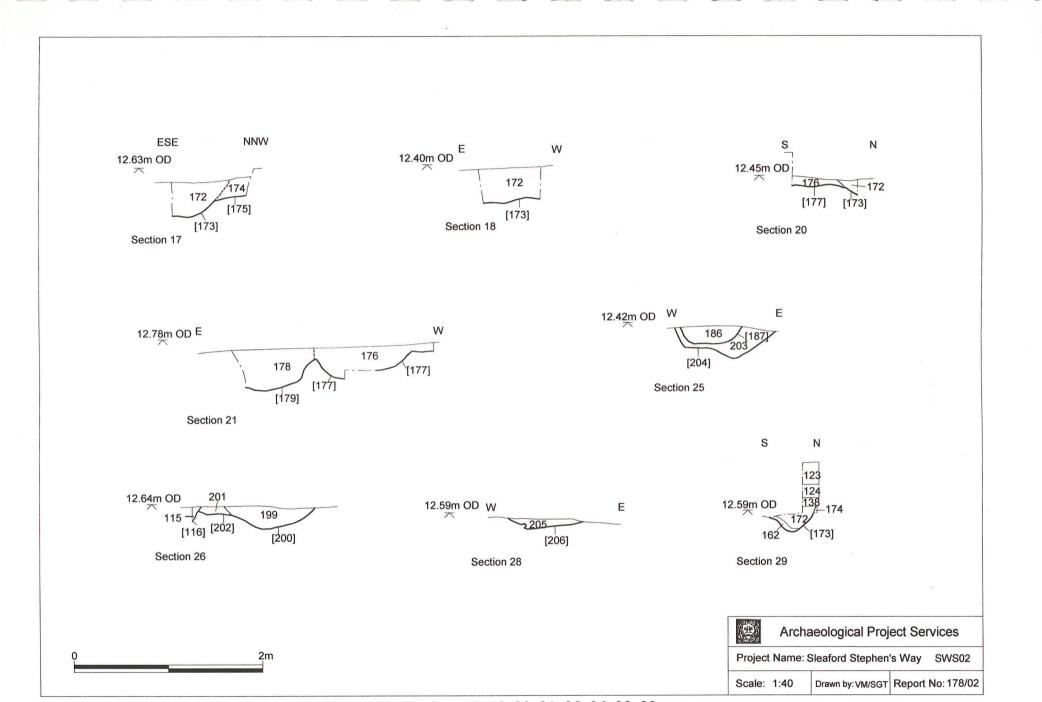


Figure 11 - Sections 17, 18, 20, 21, 25, 26, 28, 29

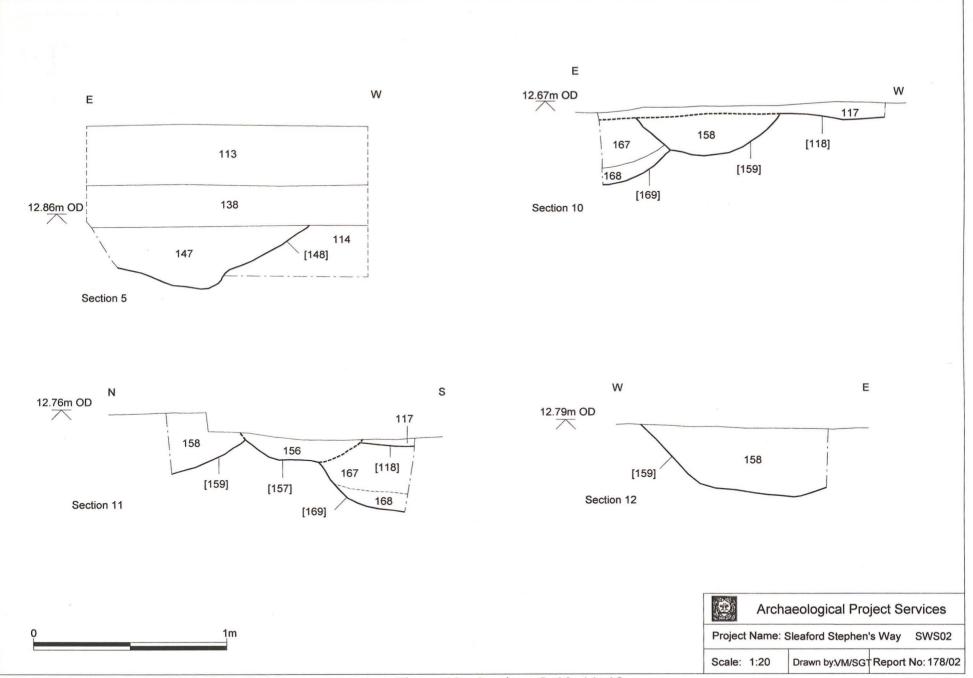


Figure 12 - Sections 5, 10, 11, 12

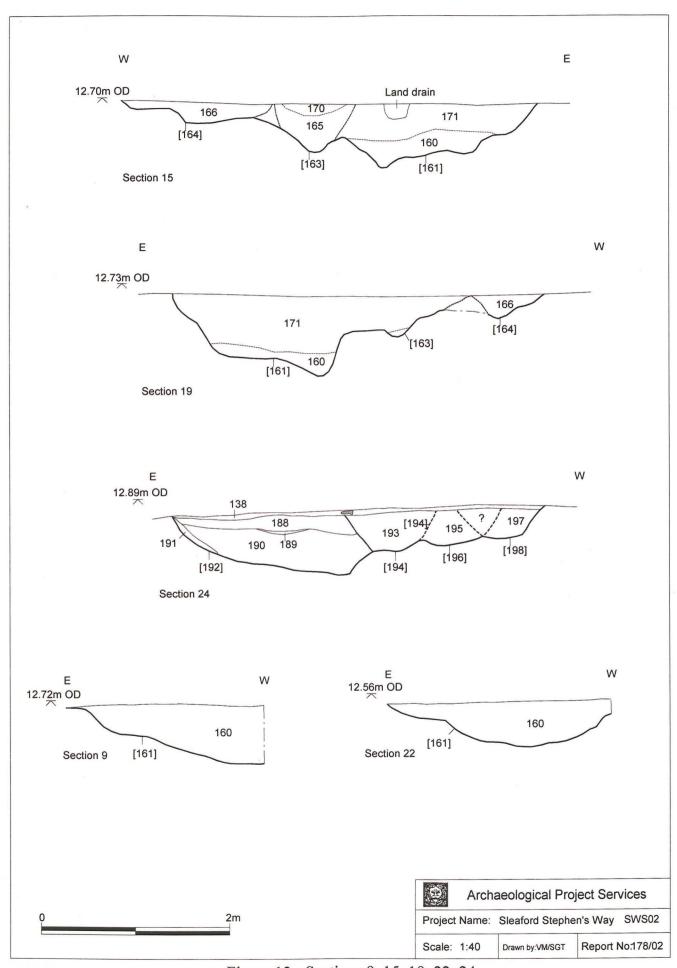


Figure 13 - Sections 9, 15, 19, 22, 24

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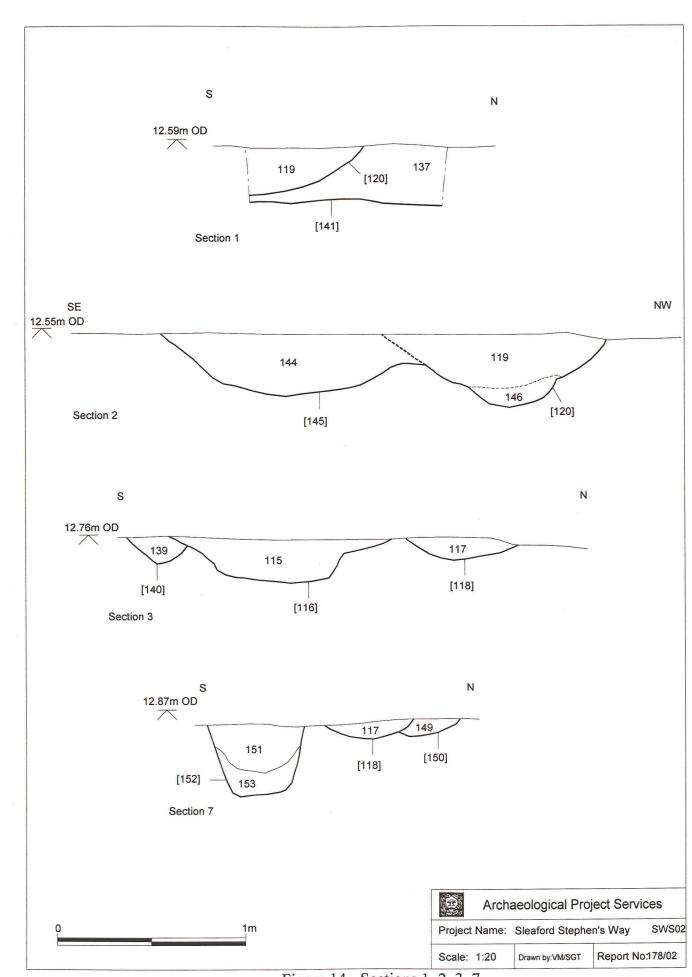
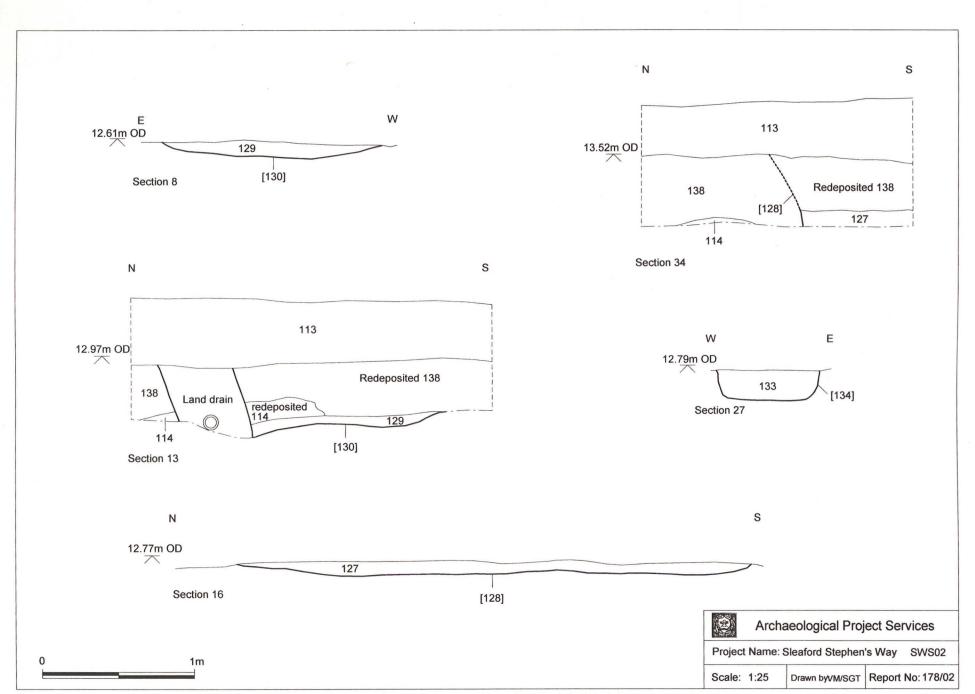
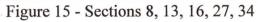


Figure 14 - Sections 1, 2, 3, 7





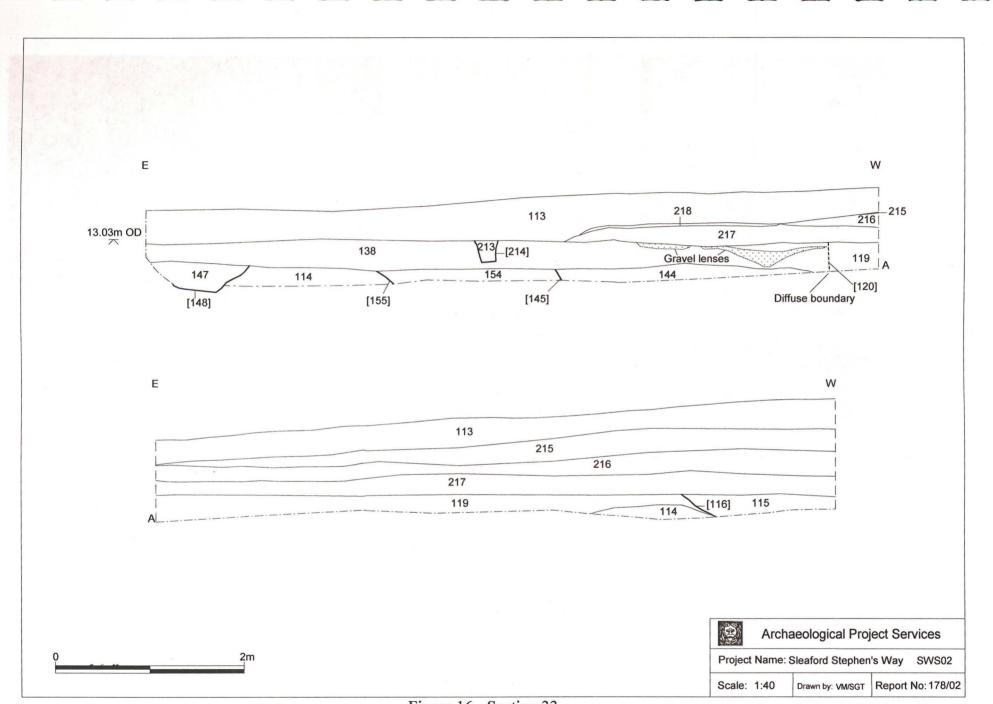


Figure 16 - Section 33



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Plate 1 General view of excavation area looking southwest.

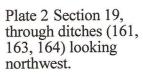
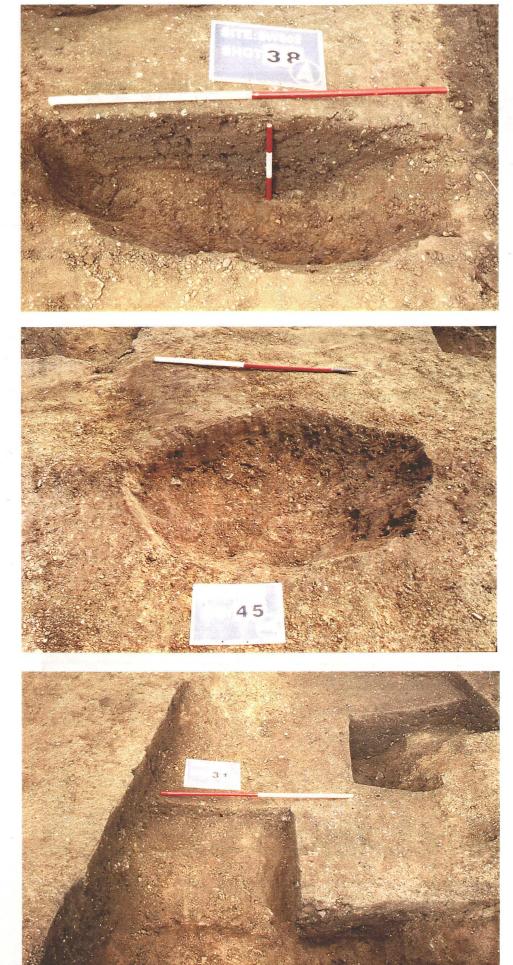




Plate 3 View of ditch (126), indicating degree of truncation on site, looking east.



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Plate 4 Section 19, through Iron Age ditch and later post hole, looking north.

Plate 5 Pit (210), looking east.

Plate 6 Excavated sections through ditches (173, 175, 179)



Plate 7 Section 16, 34 showing level and nature of modern disturbance



Plate 8 Post excavation view of site, looking north

Appendix 1

LAND OFF STEPHENS WAY SLEAFORD LINCOLNSHIRE

SPECIFICATION FOR ARCHAEOLOGICAL EXCAVATION

PREPARED FOR PERSIMMON HOMES

BY ARCHAEOLOGICAL PROJECT SERVICES Institute of Field Archaeologists' Registered Organisation No. 21

JULY 2002

SUMMARY

1

- 1.1 A scheme of archaeological investigation is required prior to residential development on land off Stephens Way, Sleaford, Lincolnshire.
- 1.2 Previous investigation at the site revealed the eastern end of a probable Middle Iron Age enclosure as well as features of possible Roman and Late Saxon date. The Iron Age enclosure lay on the western edge of the site and this area was initially earmarked for preservation in situ. The current development layout would intrude into this area, however, and the North Kesteven Heritage Officer has agreed that preservation by record would be an acceptable approach in this instance.
- 1.3 Archaeological excavation will be undertaken of the areas of proposed disturbance to the archaeologically sensitive area. Topsoil will be stripped by mechanical excavator and the archaeological features uncovered excavated according to the sampling criteria laid out below. The archaeological features exposed will be recorded in writing, graphically and photographically.
- 1.4 On completion of the fieldwork a report will be prepared detailing the results of the investigation. The report will consist of a narrative supported by illustrations and photographs.

2 INTRODUCTION

- 2.1 This document comprises a specification for archaeological excavation prior to residential development on land off Stephens Way, Sleaford, Lincolnshire, National Grid Reference TF 0735 4537.
- 2.2 This document contains the following parts:
 - 2.2.1 Overview.
 - 2.2.2 Stages of work and methodologies.
 - 2.2.3 List of specialists.
 - 2.2.4 Programme of works and staffing structure of the project

3 SITE LOCATION

3.1 Sleaford is located approximately 27km south of Lincoln. The development site is situated in the eastern part of the town, south of Boston Road, and is bounded by a railtrack to the south, a playing field to the north, Advanta Seeds to the west and the residential area of Stephens Way to the east. The site is a grassed area of 3.7ha lying at National Grid Reference TF 0735 4537.

4 PLANNING BACKGROUND

4.1 A planning application (N/57/0916/99) was submitted to North Kesteven District Council for a programme of residential development. As part of the permission for the development the area of the Middle Iron Age enclosure was earmarked for preservation *in situ*. In discussions with the North Kesteven Heritage Officer it has been agreed that limited disturbance within this area will be acceptable on condition that excavation (preservation by record) is undertaken.

SOILS AND TOPOGRAPHY

5

6

5.1 The site lies at approximately 14m OD on fairly flat and level land. Soils of the area are Ruskington Association gleyic brown calcareous earths developed on glaciofluvial sand and gravel (Hodge *et al.* 1984 304).

ARCHAEOLOGICAL OVERVIEW

- 6.1 Prehistoric flints and a Bronze Age axe have previously been found just to the south of the site while another Bronze Age axe has been found in the southern part of the investigation area. A Middle Iron Age palisaded enclosure has been investigated 300m to the east of the site. Old Sleaford Late Iron Age settlement and mint has been the subject of numerous investigations and is located a little to the northeast of the site.
- 6.2 The Old Sleaford Iron Age site was succeeded by an extensive Romano-British settlement in the same basic location. This probable Roman small town was situated astride the Mareham Lane Roman road which bypasses the present investigation area *c*. 300m to the east. Roman pottery has been found in the northern field of the site and two Roman coins have been recovered from the southern field. Previous geophysical survey on the northern field identified linear and curvilinear remains of probable archaeological origin. A large but undated north-south ditch was located in the southern field during minor excavations to remove contaminated soil.
- 6.3 Geophysical survey undertaken over the development area identified a number of linear, curvilinear and circular anomalies thought to be archaeological features. These were investigated through a programme of trial trenching (Rayner 1999). Features dating from the Iron Age period onwards were recorded. On the western edge of the site the eastern end of a possible Middle Iron Age enclosure was identified. A break in the ditch on its eastern side may represent an entrance.

7 AIMS AND OBJECTIVES

- 7.1 The aim of the excavation will be to achieve preservation by record of archaeological features within the area threatened by development.
- 7.2 The objectives of the excavation will be to fully investigate and establish the type, chronology, density, spatial arrangement and extent of archaeological remains within the specified area.

8 SITE OPERATIONS

- 8.1 <u>General considerations</u>
 - 8.1.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigations.
 - 8.1.2 The work will be undertaken according to the relevant codes of practise issued by the Institute of Field Archaeologists (IFA), under the management of a Member of the institute (MIFA). Archaeological Project Services is IFA registered organisation no. 21.
 - 8.1.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.

8.2

8.3 Methodology

- 8.3.1 The area of proposed disturbance to the archaeologically sensitive area, together with a 2m buffer, will be excavated. This will comprise an area 30m long and varying in width from 6.5m to 15.5m.
- 8.3.2 Removal of the topsoil and subsoil will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. Thereafter, excavation will be by hand to enable the identification and analysis of the archaeological features exposed.
- 8.3.3 Investigation of the archaeological features exposed will be undertaken in order to determine their date, form and function and will be undertaken in accordance with the sampling criteria laid out below. The level of sampling may be varied depending on the state of preservation but it is envisaged that features on site be subject to intensive sampling, as defined below.
- 8.3.4 Archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 8.3.5 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.
- 8.3.6 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:
 - the site before the commencement of field operations.
 - the site during work to show specific stages of work, and the layout of the archaeology in specific areas.
 - individual features and, where appropriate, their sections.
 - groups of features where their relationship is important
 - the site on completion of field work
- 8.3.7 Should buried soils be encountered then these will be examined *in situ* by soil specialists. Sampling for pollen assessment, soil micromorphology, and/or bulk finds recovery will be undertaken according to the advice provided by the specialists.
- 8.3.8 Samples will be taken from all waterlogged feature fills. Otherwise, samples will be taken from primary and secondary fills of ditches and pits, the level of sampling being appropriate to the content of the individual feature. Samples will be retained from approximately 50% of half-sectioned postholes, where forming components of clearly-defined structures. Sampling methods will follow the Centre for Archaeology Guidelines for Environmental Archaeology (English Heritage 2002).
- 8.3.9 Deposits will be sampled for scientific dating where appropriate. Radiocarbon dating may be possible if substantial quantities of charred material can be recovered from bulk

samples.

- 8.3.10 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis. A metal detector may be used to assist artefact recovery.
- 8.3.11 The precise location of features within the site and the location of site recording grid will be established by an EDM survey.

8.3 <u>Sampling criteria</u>

- 8.3.1 Enclosure and linear ditches:
 - Non-intensive 5% of exposed length, targeted at intersections, entrances/terminals and in evenly spaced sections along their length.
 - Intensive up to 10% sample of exposed length.
- 8.3.2 Ring/curvilinear ditches:
 - Non-intensive 25% of each feature targeted at entrances/ terminals, a section diametrically opposed to the entrance causeway and sections at the mid-point of each side.
 - Intensive increase sampling level to up to 50%.

8.3.3 Timber structures represented by postholes, beam slots etc:

- Non-intensive 50% of postholes/structural features to be half-sectioned.
- Intensive increase sample to 100%; Structures with high quality evidence for the nature of wall construction full excavation; Structures with *in-situ* floors full excavation with 3-dimensional spatial recording of finds.

8.3.4 Pits:

- For non-intensive excavation of individual pits or small groups of pits, 50% of pits will be half-sectioned.
- Intensive excavation increase sampling level to 100%; full excavation of particularly well-preserved or potentially informative features.
- 8.3.5 Burials. Whether inhumation or cremation, all burials will necessitate full and detailed excavation. This will be undertaken under appropriate Home Office and environmental health regulations.
- 8.3.6 Special deposits: any deposits of particular importance e.g. potential ritual deposits, large closely stratified pottery assemblages, good environmental deposits etc. will require full excavation.

9 ENVIRONMENTAL SAMPLING

9.1 During the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material

present on the site and its potential for additional analysis. The results of the specialist's assessment will be incorporated into the final report.

10 POST-EXCAVATION

- 10.1 Stage 1
 - 10.1.1 On completion of site operations, the records and schedules produced during the investigations will be checked and ordered to ensure that they form a uniform sequence forming a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued and labelled, the labelling referring to schedules identifying the subject/s photographed.
 - 10.1.2 All finds recovered during the field work will be washed, marked and packaged according to the deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

10.2 Stage 2

- 10.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 10.2.2 Finds will be sent to specialists for identification and dating.

10.3 Stage 3

- 10.3.1 On completion of stage 2, a report detailing the findings of the investigations will be prepared.
- 10.3.2 This will consist of:
 - A non-technical summary of the results of the investigations.
 - A description of the archaeological setting of the investigations.
 - Description of the topography of the site.
 - Description of the methodologies used during the investigations.
 - A text describing the findings of the investigations.
 - A consideration of the local, regional and national context of the investigations' findings.
 - Plans of the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
 - Sections of the archaeological features.
 - Interpretation of the archaeological features exposed, and their chronology and setting within the surrounding landscape.

- Specialist reports on the finds from the site.
- Appropriate photographs of the site and specific archaeological features.

11 REPORT DEPOSITION

11.1 Copies of the report will be sent to the Client; the North Kesteven District Council Heritage Officer; North Kesteven District Council Planning Department; and to the County Council Archaeological Sites and Monuments Record.

12 ARCHIVE

12.1 The documentation and records generated during the investigations will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This will be undertaken following the requirements of the document titled Conditions for the Acceptance of Project Archives for long term storage and curation.

13 PUBLICATION

13.1 A report of the findings of the investigations will be presented as a condensed article to the editor of the journal *Lincolnshire History and Archaeology*. If appropriate, notes on the findings will be submitted to the appropriate national journals: *Britannia* for discoveries of Roman date, and *Medieval Archaeology* and the *Journal of the Medieval Settlement Research Group* for findings of medieval or later date.

14 CURATORIAL RESPONSIBILITY

14.1 Curatorial responsibility for the archaeological work undertaken on the site lies with the North Kesteven District Council Heritage Officer. They will be given as much notice as possible, ideally seven days, before the commencement of the project.

15 VARIATIONS

15.1 Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the archaeological curator.

16 PROGRAMME OF WORKS AND STAFFING LEVELS

- 16.1 Fieldwork is expected to be undertaken by 4 staff, a supervisor and 3 assistants, and to take seven (7) days.
- 16.2 Post-excavation analysis and report production is expected to take 15 person-days within a notional programme of 10 days. A project officer or supervisor will undertake most of the analysis, with assistance from the finds supervisor and CAD illustrator. Two days of specialist time are allotted in the project budget.

17 CONTINGENCIES

17.1 Should significant archaeological remains be encountered over and above those already identified during evaluation, then the archaeological curator may require additional time to ensure the appropriate level of excavation / recording / sampling of those remains. Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the

archaeological curator.

18 SPECIALISTS TO BE USED DURING THE PROJECT

18.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

Task	Body to be undertaking the work			
Conservation	Conservation Laboratory, City and County Museum, Lincoln			
Pottery Analysis	Prehistoric - Trent & Peak Archaeological Trust			
	Roman - B Precious, Independent Specialist			
	Anglo-Saxon - J Young, Independent Specialist			
	Medieval and later - G Taylor, APS in consultation with H Healey, Independent Archaeologist			
Non-pottery Artefacts	J Cowgill, Independent Specialist			
Animal Bones	Environmental Archaeology Consultancy			
Environmental Analysis	J Rackham or Val Fryer, Independent Specialists			
Human Remains Analysis	R Gowland, Independent Specialist			

19 INSURANCES

19.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability Insurance of £10,000,000, together with Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

20 COPYRIGHT

- 20.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 20.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 20.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the Copyright, Designs and Patents Act 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be

removed from said planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the Copyright, Designs and Patents Act 1988 and may result in legal action.

20.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

21 BIBLIOGRAPHY

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 Soils and their use in Eastern England, Soil Survey of England and Wales 13

Rayner, T. 1999 Archaeological Evaluation on Land off Stephens Way, Sleaford, Lincolnshire (SSW99) unpublished APS client report 101/99

Specification: Version 2, 17 July 2002

9

Appendix 2 Context Summary

Context numbers follow on from prior evaluation. Numbers 001 - 112 not shown here.

Context No.	Same as	Section	Fig. No.	Description	Interpretation	Phase
113	-	13,33,34	12,15,16	Friable, dark blackish grey sandy silt, <i>c</i> . 0.4m thick containing frequent modern debris, pottery, coal, cinders, roots & rootlets.	Topsoil	Phase 5 – modern deposits
114	-	13,33,34	12,15,16	Loose, mottled yellow and brownish red sand and gravel, exposed in plan, not fully excavated	Natural geological deposit	Phase 1 – Natural deposits
115	-	3,26,33	8,11,14,16	Loose, mid-brown clayey sand containing moderate roots and charcoal fragments and frequent small pebbles	Fill of ditch 116	Phase 5 – Modern deposits
116	-	3,26,33	8,11,14,16	Linear cut, >17.6m long, x 1.05m wide x 0.23m deep. WSW-ENE orientation	Ditch	Phase 5 – Modern deposits
117	-	3,7	7,12,14	Loose, light brown clayey sand containing frequent angular pea gravel	Fill of 118	Phase 4 – Post Romano- British
118	202	3,7	7,12,14	Linear cut, >15m long x 0.58m wide x 0.14m deep, WSW-ENE orientation	Ditch	Phase 4 – Post Romano- British deposits
119	-	1,2	8,14,16	Friable, dark-brown clayey sand containing frequent small pebbles	Fill of 120	Phase 4 – Post Romano- British deposits
120	-	1,2	8,14,16	Linear cut, >13.5m long x 1.18m wide x 0.39m deep	Ditch	Phase 4 – Post Romano- British deposits
121	-	-	8	Loose, blackish grey silty sand containing frequent modern demolition debris	Fill of 122	Phase 5 – Modern deposits

122	-	-	8	Rectangular cut, exposed in plan 3m long x 2m wide, ESE-WNW orientation	Modern pit	Phase 5 – Modern deposits
123	215, 216	29	11	Compact, dark brown silty sand containing modern demolition debris, up to 0.46m thick	Dumped, made ground	Phase 5 – Modern deposits
124	217	29	11	Firm, dark greyish brown, silty sand containing frequent pebbles, occasional coal and ceramic building material fragments, 0.28m thick	Buried topsoil	Phase 5 – Modern deposits
125	-	14	5,10	Firm, mid-brown clayey sand containing frequent angular and rounded pebbles and occasional charcoal fragments	Fill of 126	Phase 2 – Probable prehistoric and Iron Age deposits
126	-	14	5,10	Linear cut, 0.5m wide x 1.72m long x 50mm deep, east-west orientation	Ditch	Phase 2 – Probable prehistoric and Iron Age deposits
127	-	16,34	8,15	Loose, mottled black and mid-brown clayey sand containing frequent angular and rounded pebbles and occasional patches of redeposited natural sand and gravel	Fill of 128	Phase 5 – Modern deposits
128	-	16,34	8,15	Rectangular cut, 3.34m N-S x 1.79, E-W x 70mm deep	Probable modern seed testing bed	Phase 5 -Modern deposits
129	135	8,13	8,15	Loose, mottled black and mid brown clayey sand containing frequent angular and rounded pebbles and occasional patches of redeposited natural sand and gravel	Fill of 130	Phase 5 – Modern deposits
130	136	8,13	8,15	Linear cut, 11.6m long x 1.5m wide x 70mm deep, N-S orientation turns E-W	Modern seed testing trench	Phase 5 – Modern deposits
131	-	-	-	DUPLICATED CONTEXT	-	-
132	-	-	-	DUPLICATED CONTEXT	-	-

133	-	27	8,15	Soft, mottled mid-grey, light grey and mid-brown clayey sand containing	Fill of 134	Phase 5 - Modern deposits
				frequent angular gravel and moderate charcoal and ash		
134	-	27	8,15	Rectangular cut, 0.68m wide, 1.22m long x 0.19m deep, N-S orientation	Probable modern seed testing cut	Phase 5 – Modern deposits
135	129	13	8	Loose, mottled black and mid brown clayey sand containing frequent angular and rounded pebbles and occasional patches of redeposited natural sand and gravel	Fill of 136	Phase 5 – Modern deposits
136	130	13	8	Linear cut, >2m long x 1.8m wide x 70mm deep, E-W orientation	Modern seed testing trench	Phase 5 – Modern deposits
137	-	1	14	Friable, dark brownish grey clayey sand containing frequent small pebbles	Fill of 141	Phase 3 – Romano-British
138	-	13,24,29, 33,34	12,15,16	Loose, light brown clayey sand containing moderate rounded pebbles, charcoal, coal and occasional ceramic building material fragments, 0.34m thick	Subsoil	Phase 5 – Modern deposits
139	-	3	14	Loose, mid grey with reddish-yellow mottling, clayey sand containing frequent gravel, occasional roots and charcoal fragments	Fill of 140	Phase 4 – Post-Romano- British deposits
140	-	3	7,14	Linear cut, 1.5m long x 0.35m wide x 0.14m deep, E-W orientation	Pit	Phase 4 – Post-Romano- British deposits
141	155 161 183 192	1	6,14	Linear cut, gentle curve to W at N extent. > $30.9m \log x \ c.2.3m$ wide x $c.0.65m$ deep. N-S orientation	Ditch	Phase 3 – Romano-British deposits

142	-	4	10	Soft, light brown with yellow mottling slightly clayey sand containing moderate flint gravel, occasional rounded pebbles and charcoal flecks	Fill of 143	Phase 2 – Probable prehistoric and Iron Age deposits
143	-	4	5,10	Irregular ovoid cut, 1.9m x 1.2m x 0.2m deep, N-S orientation, concave base	?Pit	Phase 2 – Probable prehistoric and Iron Age deposits
144	-	2,33	14,16	Friable, mid-brown silty sand frequent small pebbles	Fill of 145	Phase 4 – Post-Romano- British deposits
145	-	2,33	7,14,16	Linear cut, 1.3m wide x >6m long x 0.32m deep, WSW-ENE orientation	Ditch	Phase 4 – Post-Romano- British deposits
146	-	2	14	Friable, mixed dark greyish brown and mid-reddish brown silty sand containing frequent sub-rounded pebbles	Primary fill of 120	Phase 4 – Post-Romano- British deposits
147	-	5,6,33	10,12,16	Friable, light grey with light reddish brown mottling silty sand containing moderate small sub-rounded pebbles	Fill of 148	Phase 2 – Probable prehistoric and Iron Age deposits
148	-	5,6,33	5,10,12,16	Linear cut, 1.1m wide x >1.14m long x 0.33m deep, NW-SE orientation	?Possible pit	Phase 2 – Probable prehistoric and Iron Age deposits
149	-	7	7,14	Loose, light brown clayey gravely sand containing frequent angular gravel and moderate iron-panning	Fill of 150	Phase 4 – Post-Romano- British deposits
150	-	7	7,14	Linear cut, 2.5m long x 0.3m wide x 0.1m deep, WSW-ENE orientation	Truncated section of ditch	Phase 4 – Post-Romano- British deposits
151	-	7	7,14	Compact, mid-grey clayey sand containing frequent angular flint gravel and occasional charcoal fragments	Fill of 152	Phase 4 – Post-Romano- British deposits
152	-	7	7,14	Sub-circular cut, c.0.52 diameter x 0.37m deep, steep nr. Vertical sides, flat base	Post-hole	Phase 4 – Post-Romano- British deposits

153	-	7	14	Loose, light brown clayey sand containing frequent angular gravel	Packing fill of 152	Phase 4 – Post-Romano- British deposits
154	-	33	16	Friable, mid-brownish grey silty sand containing frequent small sub-rounded gravel	Fill of 155	Phase 3 – Romano-British deposits
155	141 161 183 192	33	6,16	Linear cut – same as 141	Ditch	Phase 3 – Romano-British deposits
156	-	11	12	Friable, mid-brown, silty sand containing frequent gravel	Fill of 157	Phase 4 – Post-Romano- British deposits
157	150 200	11	7,12	Linear cut, 3m long x 0.65m wide x 0.13m deep WSW-ENE orientation	Ditch	Phase 4 – Post-Romano- British deposits
158	197	10, 11, 12	12	Friable, dark greyish brown silty sand containing frequent gravel and occasional charcoal flecks	Fill of 159	Phase 3 – Romano-British deposits
159	175 177 164 198	10, 11, 12	6,12	Cut feature, >21.5m N-S x 0.95m wide x 0.35m deep, N-S orientation curves to W at N extent	Ditch	Phase 3 – Romano-British deposits
160		9,15,19, 22,23	10,13	Loose, mid-brown silty sand containing occasional shell and small rounded pebbles	Fill of 161	Phase 3 – Romano-British
161	141 155 183 192	9,15,19, 22,33	6,10,13	Linear cut – same as 141	Ditch	Phase 3 – Romano-British deposits
162	-	29	11	Friable, mid-olive brown silty sand containing frequent gravel	Fill of 173	Phase 2 – Probable prehistoric and Iron Age deposits

163	179 194	15,19	6,13	Linear cut, >5m long	Ditch	Phase 3 – Romano-British deposits
164	206 159 175 177 198	15,19	6,13	Linear cut, >5m long x 1.1m wide x 0.25m deep, N-S orientation	Ditch	Phase 3 – Romano-British deposits
165	-	15	13	Loose, light brown silty sand containing frequent small gravel	Fill of 163	Phase 3 – Romano-British deposits
166	-	15, 19	13	Loose, mid-brown silty sand containing occasional shell fragments and frequent gravel	Fill of 164	Phase 3 – Romano-British deposits
167	-	10,11	12	Friable, dark brownish grey silty sand containing frequent gravel	Fill of 169	Phase 3 – Romano-British deposits
168	-	10,11	12	Friable, dark olive-greyish brown silty sand containing frequent small limestone fragments	Fill of 169	Phase 3 – Romano-British deposits
169	-	10,11	6,12	Sub-circular cut, 0.64m x 0.38m x 0.36m deep, steep sides, slightly concave base	Post hole	Phase 3 – Romano-British deposits
170	-	15	13	Loose, mid-brown silty sand containing occasional small limestone fragments	Fill of 163	Phase 3 – Romano-British deposits
171	-	15,19	13	Loose, mid-brown silty sand containing occasional rounded pebbles	Fill of 161	Phase 3 – Romano-British deposits
172	-	17,18,20, 29	11	Soft, dark greyish brown silty sand containing frequent small rounded and sub-rounded limestone fragments	Fill of 173	Phase 2 – Probable prehistoric and Iron Age deposits
173	181 204	17,18,20, 29	5,11	Linear cut, 1.1m wide x >2.5m long x 0.39m deep, E-W orientation	Ditch	Phase 2 – Probable prehistoric and Iron Age deposits
174	-	17,29	11	Friable, dark olive brown silty sand containing frequent gravel	Fill of 175	Phase 3 – Romano-British deposits

175	159 164	17,29	6,11	Linear cut, >1.5m long x 0.9m wide x 0.3m deep, NNW-SSE orientation	Ditch	Phase 3 – Romano-British deposits
	177 198					
176		20,21	11	Friable, mid-olive brown silty sand containing frequent gravel	Fill of 177	Phase 3 – Romano-British deposits
177	159 164 175 198	20,21	6,11	Linear cut, >2m long x 1m wide x 0.3m deep, NW-SE orientation	Ditch	Phase 3 – Romano-British deposits
178	-	21	11	Friable, dark olive-brown silty sand containing frequent gravel	Fill of 179	Phase 3 – Romano-British deposits
179	163 194 206	21	6,11	Linear cut, >5m long x 1m wide x 0.38m deep, NW-SE orientation	Ditch	Phase 3 – Romano-British deposits
180	-	-	-	Friable, dark brownish grey silty sand containing frequent gravel	Fill of 181	Phase 2 – Probable prehistoric and Iron Age deposits
181	173 204	-	5	Linear cut – continuation of 173	Ditch	Phase 2 – Probable prehistoric and Iron Age deposits
182	-	-	-	Friable, dark brownish grey silty sand containing frequent gravel	Fill of 183	Phase 3 – Romano-British deposits
183	141 155 161 192	-	6	Linear cut	Ditch	Phase 3 – Romano-British deposits
184	-	23	5	Loose, mid-brown clayey sand containing moderate gravel, occasional charcoal fragments and patches of redeposited natural	Fill of 185	Phase 2 – Probable prehistoric and Iron Age deposits

185	-	23	5	Rectangular cut, 1.75m N-S x 1.27m E-W x 0.24m deep Flat base	Pit	Phase 2 – Probable prehistoric and Iron Age deposits
186	-	25	11	Loose, mid-brown silty sand containing occasional shell fragments and gravel	Fill of 187	Phase 3 – Romano-British deposits
187	-	25	6,11	Oval cut 0.65m x 0.35m x 0.26m deep, steep sides slightly concave base	Post hole	Phase 3 – Romano-British deposits
188	-	24	13	Loose, mid-brown clayey sand containing occasional pea gravel and moderate charcoal fragments	Fill of 192	Phase 3 – Romano-British deposits
189	-	24	13	Soft, mid-brownish yellow slightly clayey sand	Fill of 192	Phase 3 – Romano-British deposits
190	-	24	13	Loose, mid-grey clayey sand containing moderate gravel and charcoal fragments and frequent tiny snails	Fill of 192	Phase 3 – Romano-British deposits
191	-	24	13	Loose, mid-greyish brown sandy clay containing frequent angular gravel	Primary fill of 192	Phase 3 – Romano-British deposits
192	141 155 161 183	24	6,13	Linear cut	Ditch	Phase 3 – Romano-British deposits
193	-	24	13	Loose, mid-brownish grey clayey sand containing moderate charcoal flecks and pea gravel	Fill of 194	Phase 3 – Romano-British deposits
194	163 179 206	24	6,13	Linear cut, >0.8m long x 0.95m wide x 0.42m deep, N-S orientation	Ditch	Phase 3 – Romano-British deposits
195	-	24	13	Loose, dark brownish grey clayey sand containing moderate charcoal fragments and angular gravel	Fill of 196	Phase 3 – Romano-British deposits

196	-	24	6,13	?Circular cut, 0.63m diameter x 0.36m deep, slightly concave base	Post hole	Phase 3 – Romano-British deposits
197	-	24	13	Loose, mid-brown clayey sand containing frequent angular gravel	Fill of 198	Phase 3 – Romano-British deposits
198	159 164 175 177	24	6,13	Linear cut >0.8m long x 0.88m wide x 0.34m deep, N-S orientation	Ditch	Phase 3 – Romano-British deposits
199	-	26	7,11	Firm, mid-brownish grey silty sand containing occasional charcoal fragments and moderate gravel	Fill of 200	Phase 4 – Post-Romano- British deposits
200	150 157	26	7,11	Linear cut, >5m long x 0.97m wide x 0.22m deep, WSW-ENE orientation	Ditch	Phase 4 – Post-Romano- British deposits
201	-	26	7,11	Friable, mid-brown silty sand containing frequent small sub-rounded limestone fragments	Fill of 202	Phase 4 – Post-Romano- British deposits
202	118	26	7,11	Linear cut, >5m x 0.42m wide x 0.1m deep	Ditch	Phase 4 – Post-Romano- British deposits
203	-	25	11	Loose, mid-brown to dark grey silty sand containing moderate small gravel and occasional shell fragments	Fill of 204	Phase 2 – Probable prehistoric and Iron Age deposits
204	173 181	25	5,11	Curvilinear cut, >7m N-S turning quite sharply to >3.2m E-W. 1.2m wide max x 0.4m deep	Ditch	Phase 2 – Probable prehistoric and Iron Age deposits
205	-	28	11	Friable, mid-olive brown silty sand containing frequent gravel	Fill of 206	Phase 3 – Romano-British deposits
206	163 179 194	28	6,11	Linear cut	Ditch	Phase 3 – Romano-British deposits

207	-	30	5,10	Soft, mottled light brown, light reddish brown and white sand containing occasional tiny charcoal flecks and angular gravel	Fill of 208	Phase 2 – Probable prehistoric and Iron Age deposits
208	-	30	5,10	Sub-circular cut, 0.97m N-S x 0.86 E-W x 0.11m deep, N-S orientation flat base	?Pit	Phase 2 – Probable prehistoric and Iron Age deposits
209	-	31	5,10	Soft, light brown with grey and reddish brown mottling sand containing moderate angular gravel and occasional charcoal fragments	Fill of 210	Phase 2 – Probable prehistoric and Iron Age deposits
210	-	31	5,10	Irregular oval shaped cut, 1.8m SW-NE x 1.2 NW-SE x 0.21m deep uneven concave base	?Pit	Phase 2 – Probable prehistoric and Iron Age deposits
211	-	32	5,10	Compact, mid-greyish brown clayey sand containing moderate gravel and occasional charcoal fragments	Fill of 212	Phase 2 – Probable prehistoric and Iron Age deposits
212	-	32	5,10	Rectangular cut, 0.66m N-S x 0.56m E-W x 90mm deep N-S orientation	?Pit	Phase 2 – Probable prehistoric and Iron Age deposits
213	-	33	16	Soft, mid-grey silty sand containing occasional pea gravel	Fill of 214	Phase 5 – Modern deposits
214	-	33	16	?Square cut, 0.24m wide x 0.22m deep Nr. Vertical sides flat base	Post hole	Phase 5 – Modern deposits
215	-	33	16	Compact light yellowish brown and brownish grey sandy silt containing frequent sub-rounded flint and occasional mortar fragments, 0.26m thick	Dumped deposit/made ground	Phase 5 – Modern deposits

216	-	33	16	Firm, yellowish brown sandy silt containing frequent angular flint and occasional coal and ceramic building material fragments, 0.22m thick	Dumped deposit/made ground	Phase 5 – Modern deposits
217	124	33	16	Compact, dark grey silt, 0.2m thick	Buried topsoil	Phase 5 – Modern deposits
218	-	33	16	Firm, mid-brown clayey sand, 40mm thick x 2.12m E-W	Dumped deposit	Phase 5 – Modern deposits

Appendix 3

THE POST-MEDIEVAL POTTERY AND OTHER FINDS by Hilary Healey and Gary Taylor

Recording of the pottery was undertaken with reference to guidelines prepared by the Medieval Pottery Research Group (Slowikowski *et al.* 2001) and the pottery was quantified using the chronology and coding system of the Lincolnshire ceramic type series. A total of 11 fragments of post-medieval pottery weighing 200g was recovered from 3 separate contexts. In addition to the pottery, a quantity of other items, metals, brick/tile, stone and other materials, comprising 42 objects weighing a total of 4433g, was also retrieved.

Provenance

The material was recovered from topsoil (113), subsoil (138), ditch fills (115, 117, 129, 160, 188, 190, 203), pit fill (142), dumped deposit (217) and the evaluation trench backfill.

The earthenwares may have been made in the general area of Sleaford, though could be from further afield, perhaps Staffordshire. The most recent pottery is very probably of Staffordshire manufacture. There is a late medieval regional import, the Tudor Green ware, which was produced in the Surrey/Hampshire area.

Range

The range of material is detailed in the tables.

Table 1: Pottery

Context	Fabric Code	Description	No.	Wt (g)	Context Date
113	UGRE	Red painted earthenware, 18 th -19 th century	3	38	19 th century
	BL	Blackware, separate vessels, 17 th century	2	32	
	WHITE	White glazed tableware, separate vessels, 19 th century	2	5	
	LSTON	Grey stoneware, bottle, 19 th century	1	112	
TUDG		Tudor Green ware, drinking vessel, 15 th -16 th century	1	2	
138	BL	Blackware, drinking vessel	1	8	17 th century
160	LPM	Green glazed tableware	1	3	19 th -20 th century

Table 2: Metal

Context	Material	Description	No.	Wt (g)	Context Date
113	Iron	Clench bolt, rectangular section, diamond head; shaft 12mm x 14mm, 76mm long, head 43mm x 37mm	1	84	late 16 th -early 17 th century
	Iron	Shoe patten ring, post- medieval	1	106]
	Copper alloy	Jetton of Hanns Krauwinckel, late 16 th -early 17 th century	1	2	
18/	Silver and bone	Walking stick top, with initialled silver mount, post- medieval	1	14	
113 1020/205	Iron	Washer, 46mm external dia., 20mm dia. perforation	1	33	
115	Iron	Nail?, rectangular section	1	15	19 th -20 th century

Context	Material	Description	No.	Wt (g)	Context Date
	Iron	Wire, some galvanized, 19 th -20 th century	3	57	
129			1	28	-
217	Iron	Nail, rectangular section	1	7	<u>.</u>

A copper alloy jetton or reckoning counter was retrieved from (113). Although the legend is only partially legible, enough is evident to identify the piece as minted by Hanns Krauwinckle of Nuremburg in Germany (Wells 1966, 14).

The bone head of a walking stick was also recovered from (113). This is surmounted by a circular silver plate neatly inscribed with the initials 'RL', rendered as intertwined tendrils of foliage. These initials refer to the stick's owner.

An iron ring from a patten was also collected from (113). Pattens were wooden clogs with such iron rings attached to their undersides and were a form of overshoe worn to raise dress shoes from dirt and damp and thereby protect them (Goodall 1993, 60).

There is one definite and one possible clench bolt from the site. These types of nail were used in boat-building but also in substantial timber doors of buildings. A structural original is probably the most likely derivation of these nails.

Context	Material	Description	No.	Wt (g)	Context Date
113	Stone	Limestone, moulded with 'Jew's harp' decoration, some whitewash adhering, Saxo- Norman	1	386	19 th -20 th century
	Ceramic building material	Tile, post-medieval-19 th -20 th century	3	135	
	Glass	Green, part of bottle push-up, 19 th century	1	29	
113 1020/205	Ceramic building material	Brick, post-medieval	1	3	
	Fired clay	Fired clay	1	1	
115	Ceramic building material	Roof tile, post-medieval	1	56	18 th century
	Clay pipe	Stem, bore 5/64", 18 th century	1	3	1
138	Stone	Burnt cobble	1	185	
	Stone	Cobbles, burnt? 2 glacial erratics	3	914]
	Flint	Scraper	1	13]
	Flint	Natural flint gravel	1	5	
142	Stone	Natural pebble, glacial erratic	1	51	
	Flint	Natural, chipped and broken	1	11	
160	Stone	Burnt cobble	1	110	
1010/205	Flint	Waste Flake	1	8	
160	Stone	Burnt stone/cobble, 1 with 5mm hole through	3	652	
160 1025/205 1025/210	Stone	Burnt cobble	1	227	

Table 3: Other Finds

Context	Material	Description	No.	Wt (g)	Context Date
190	Stone	Burnt stone	3	325]
1005/205	Stone	Plano-convex stone, extremely smooth on planar side – saddle quern? burnt	1	387	
	Flint	Chert, probable waste flake	1	10	
203 1015/205	Stone	Burnt stone, mortar adhering	1	174	
217	Mortar	Mortar, impression of frogged brick, 20 th century	1	303	20 th century
	Fired clay	Fired clay, looks to be plano- convex/bun shaped	1	99	

A piece of moulded limestone was recovered from (113). This, in oolithic limestone of probable local origin, is carved with 'Jew's harp' moulding. This decorative style is of Saxo-Norman date and is virtually restricted to Lincolnshire (Fisher 1963, 14). Although once thought to be a signifier of the Late Saxon period, motifs of this type have now been recognized in association with late 11th and 12th century sculpture (Everson and Stocker 1999, 65). This particular piece has a gently curving top edge to the rear and is likely to have formed a hood mould or window surround in a church. The nearest recorded *in situ* example of this moulding-type is within Great Hale church, about 8km to the southeast. However, a church recorded in Domesday Book, and of probable Late Saxon origin, was located only 700m to the northeast. It seems highly likely that this piece of masonry is derived from this nearby church of All Saints (later St. Giles), which was probably demolished in the 16th century (Roffe 1979, 13).

Context	Species	Description	No.	Comments
eval fill 1015/205	Oyster	Shell	1	Pitted, complete valve
113	Banded snail	Shell	1	Complete
115	Garden snail	Shells	4	2 complete, 2 near complete
160 1010/205	Banded snail	Shell	1	Near complete
160 1026/205; 1025/210	Banded snail	Shell	1	Complete
188	Oyster	Shell	3(link)	Fragment
1005/205	Banded snail	Shell	1	Complete
203 1015/205	Banded snail	Shells	5	4 complete, 1 fragment

Table 4: Mollusc shell

The oyster shells are probably food waste while the snails are natural to the site. Both snail types are terrestrial species but range widely and, consequently, are not particularly useful indicators of past environments. The garden snail, *Helix aspersa*, is often associated with man in parks and gardens (Kerney and Cameron 1979, 205).

Condition

All the material is in good condition and present no long-term storage problems. Archive storage of the collection is by material class.

Documentation

There have been previous archaeological investigations at the site that revealed evidence of Iron Age and later activity (Rayner 1999). Additionally, there has been some collation and synthesis of the archaeological and historical evidence for Sleaford. Details of archaeological sites and discoveries in the area are maintained in the files of the North Kesteven Heritage Officer and the Lincolnshire County Council Sites and Monuments Record.

Potential

Most of the assemblage detailed here is of limited local potential and significance. However, the Saxo-Norman masonry is of high local and regional significance. This masonry is very probably from the nearby Late Saxon church

of All Saints/St. Giles and provides an indication of decorative motifs used in the church, the physical remains of which are limited its foundations, the building having been demolished several centuries ago.

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Appendix 4 Iron Age, Romano-British and Post-Roman pottery By Maggie Darling and Barbara Precious

CONTEXT	FABRIC	FORM	DEC	VESSNO	DWGNO	ALTER	COMMENTS	JOIN	SHERDS
113	GREY	BCUR					RIM SANDWICH FAB FINE SILTY		1
113	GREY	J				*	BS		1
113	GREY	J	B;SWL				BS		1
113	MISC	CLSD				VABR	BASE PALE OXID PROB POSTRO		1
113	NVCC	DPR					BASE		1
113	ZDATE						4C/POSTRO?		
113	ZZZ						MIX SOME PROB POSTRO; SOME		
							2C+		
117	CBM					ABR	FRAG		1
117	ZDATE						POSTRO?		
138	GREY	JB					BASE BS		2
138	GREY	JCUR		~			RIM FRAG PUNC		1
138	MISC	CLSD	HM		8		BS LTBN SHEL NO PUNC PROB		1
							POSTRO		
138	NOTG	JUG		1			BSS FAB REDUCED M13-14C		2
138	SSTMG ?	CLSD	HM				BS EMSAX?;		1
138	ZDATE						2-3C/POSTRO		
160	GREY	CLSD	_	1?			BSS	2	3
160	PART	CLSD		1		ABR	BSS BASAL?		2
160	SAMCG	18/31-31		1			BSS ANGLE		2
160	SHEL					ABR	BS NO PUNC		1
160	SLSH	JBKCUR					RIM FRAG PUNC		1
160	ZDATE						2C+		
186	SHCM	CLSD	SCR;HM			BURNTIN	BS; SIMILAR FAB; NO PUNC	203	1
							MLIA	-	
186	ZDATE			1			BSS LTBN FAB		2

190	NVCC	BK	ROUZ				L2-3C		
190		and the second se					BS; SIMILAR FAB;NO PUNC	186	1
203	SHCM	CLSD	HM?				BS; SIMILAR FAB;NO PUNC;THICK	186	1
203	SHCM	JBL	HM?	1			BSS J; BLK NO PUNC		2
203	SHCM		HM?				MLIA?		
203	ZDATE						FILL DITCH 173 CLOSE TO PH 187		
203	ZZZ						RIM SHLDR FAB A/B; 13-14C		
EVAL	BOUA	JAR					BS HANDLE SCAR; 2C ROM OR POS		1
							МРОТ		
EVAL	RWS	JUG?	-			ABR	FRAG BODY GROOVE PUNC; RO CF		1
					2		BOURNE		
EVAL	SLSH	JB					BS OXLIGHT; 13-15C?		1
EVAL	TOY?	CLSD					2C/POSTRO		
EVAL	ZDATE								

Name Name Name Name

Appendix 5

The Metalworking Residues

By Steve Thomson

Metalworking residues were recovered from two contexts, 197 and 203, both fills of ditches.

		Tab	le 1	
Context	Weight (g)	Residue	Comments	Phase
197	276	Smithing slag	1 fragment	3 - Romano- British
203	64	Undiagnostic	Possible furnace/hearth lining adhered to 1 fragment	2 – Probable prehistoric and Iron Age
203	70	Smelting slag	Probably derives from a slag tapping furnace	2 – Probable prehistoric and Iron Age

Two fragments recovered from context 203 show clear rivulets indicating liquefied, running slag, probably deriving from a bloomery furnace. Additionally, visual examination of the slag appeared to indicate a high iron content, suggesting a relatively inefficient smelting process and an early date for the residue. Remaining fragments displayed no diagnostic morphology, though one fragment appeared to have hearth or furnace lining adhered, though this may equally have derived from hot slag being in contact with the ground.

The slag recovered from context 197, was plano-convex and sub-circular in plan, typical of slags deriving from the smithing process.

Finds of metalworking debris are common to such sites. The limited amount of slag recovered, whilst suggesting metalworking within the vicinity does not indicate a primary iron working site.

Appendix 6

Stephens Way, Sleaford – SWS02 Animal bone

A small collection of 55 bone fragments were recovered from the excavations at St Stephens Way, Sleaford. The bones have been identified and recorded following the procedures of the Environmental Archaeology Consultancy (see key attached to archive catalogue) and an archive catalogue produced (see Appendix). The majority of the bone fragments have been recovered from ditch fills (Table 1). The bone is in mixed condition with some well preserved material, some appreciably poorer and a couple of fragments in very poor condition (Table 2). There is no clear pattern of preservation related to the age of the deposit. A single bone carries evidence of dog gnawing and three have been butchered.

species	172	180	203	137	160	188	190	171	197	117	186	138	113	217	999
Date	MLIA	MLIA	MLIA	RB	RB	RB	RB	?RB	?	?med	?med- PM		Mod	Mod	U/S
Feature	Ditch	Ditch		Ditch	P-hole	Subsoil	Topsoil	Topsoil							
Horse		1			3				1		Alexandric Street, Constant				
Cattle	1		3	1	4		1		1	1		1	2		1
Cattle size		1				1	1	1			3				
Sheep/goat					4						1	1			
Sheep size			1		5				ar	1				1	
Pig						1	anana ta Santa Kabupatén		1	a analysis to construct the second			1		
Red deer													1		
Fallow deer													1		
Unidentified			1		4			anna (a) an car ann an		1				1	1

Table 1: Frequency of fragments of each identified taxa in each context.

Horse, cattle, sheep, pig, red deer and fallow deer have been identified, with cattle the most frequent taxa. The deer bones have only been identified from topsoil contexts and one of these was a knife or other handle made of antler with a monogrammed disc. In contrast the fallow deer was a tibia fragment derived presumably from food debris.

Table 2: State of Preservation of the bone fragments by context

And the	context	2	3	4
MLIA	172		1	
MLIA	180		1	1
MLIA	203	Der mit mit ja unt der met an die eine met	2	3
RB	137			1
RB	160		8	12
RB	188		2	
RB	190		1	1
?RB	171	1		
?	197	1	2	
?med	117		1	2
?med-PM	186		3	1
PM-Mod	138		1	1
Mod	113		1	4
Mod	217		1	1
U/S	999		2	

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2

The assemblage includes both immature and adult animals of cattle and sheep but the sample is too small for constructive interpretation.

The material is subject to some degradation and it must be assumed that some of the bone deposited has not survived. This is likely to have affected bones from juvenile animals particularly, but may have produced a bias against, for instance smaller species and birds as well. The absence of any significant improvement in the condition of the bones from probable medieval and topsoil contexts suggests that these bones also probably derived from earlier deposits on the site.

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Key to codes used in the cataloguing of animal bones and marine shells

SPECIES:

SPECIES		SPECIES	-
CODE		CODE	
MAN	human	DOVE	Dove species
EQU	Horse	FER	Feral dove
EQSZ	Horse size	PART	Partridge
BOS	Cattle	SWAN?	Swan?
BOSL	Cattle-large	WOOD	Woodcock
CSZ	cattle size	CURL	Curlew
SUS	Pig	WADE	wader
OVCA	sheep or goat	CROK	Crow or rook
OVI	Sheep	CORV	Crow or rook
CRA	Goat	JACK	Jackdaw
SSZ	sheep size	OWL	Owl indet.
FEL	Cat	BUZZ	Buzzard
CAN	Dog	GULL	Gull sp.
AUR	Aurochs		
AUR?	Aurochs?	TURD	Turdidae
CER	red deer	BIRD	Identifiable but not
CLIC		Ditt	id'd
DAM	Fallow deer	PASS	Passerine
CLS	roe deer	LBIRD	Large bird
LEP	Hare	UNIB	Bird indet
ORC	Rabbit		
LAG	Lagomorph	FROG	Erog
CARN	Carnivore	FRTO	Frog Frog or toad
and the second sec	Fox	FRIO	Frog of toad
FOX			
POLE	Polecat/ferret	0.10	0.111.1.0.1
WEA	weasel	GAD	Gadid, cod family
BADG	Badger	LING	Ling
SEAL	seal	HADD	Haddock
SQU?	Squirrel?	RAY	ray
BEAV	Beaver	FISH	Fish
ROD	Rodent	UNIF	Fish indet
RAT	Rat		
AGR	Field vole	OYS	oyster
ARV	Water vole	COK	Cockle
MUS	House mouse	MUSS	Common Mussel
SORA	Common shrew	WHELK	Common whelk
MOLE	Mole	HEL	Helix aspersa
SMA	Small mammal	HELIX	Helix sp.
UNI	Unknown	HELN	Helix nemoralis
		SNAIL	snail
CHIK	Chicken		
CHKZ	Chicken size	FOSS	Fossil bone
GOOS	Goose, dom		
GOOS?	Goose, dom.?		
GSSZ	Goose size		
GSSP	Goose species		
GOSZ	Goose, poss. Wild		
DUCK	Duck, domestic		
	sp.		
DUCK?	Duck?		
DKSP	Duck species		
DSP	Duck species indet		
MALL	Duck, dom.		
TURK	Turkey		
1 Onthe	1 di Ruj		

1

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BONE ELEMENT:

BONE CODE		BONE CODE	
SKEL	skeleton	SCP	scapula
SKL	skull	HUM	humerus
ANT	antler	RAD	radius
ANT?	antier	ULN	ulna
ATT	antler tine	RUL	radius and ulna
HC			
	horn core	C/T	carpus/tarsus
TEMP FRNT	temporal	C23	carpus 2+3
	frontal	CAR	carpus
PET	petrous	CPA	accessory carpal
PAR	parietal	CPI	intermediate carpal
OCIP	occipital	CPR	radial carpal
ZYG	zygomatic	CPU	ulnal carpal
NAS	nasal	MTC	metacarpus
PMX	premaxilla	MC1-5	metacarpus 1-5
MAN	mandible	MTP	metapodial
MNT	mandibular tooth	MPL	lateral metapodial
DLI	deciduous lower incisor	INN	innominate
DLPM1-4	deciduous lower premolar 1-4	ILM	ilium
LI	lower incisor (and 1-3)	PUB	pubis
LC	lower canine	ISH	ischium
LPM1-LPM4	lower premolar 1-4	FEM	femur
LM1-LM3	lower molar 1 - molar 3	PAT	patella
MAX	maxilla	TIB	tibia
DUI	deciduous upper incisor	FIB	fibula
UI	upper incisor (1-3)	LML	lateral malleolus
UC	upper canine	AST	astragalus
DUPM	deciduous upper premolar	CAL	calcaneum
DUPM1-4	deciduous upper premolar 1-4	CQ	centroquartal
UPM1-UPM4	upper premolar 1-4	TAR3	tarsus 3
UM1-UM3	upper molar 1 - molar 3	T4	tarsus 4
MXT	maxillary tooth	TAR	tarsus
TTH	indeterminate tooth	MTT	metatarsus
INC	incisor	MT1-5	metatarsus 1-5
HYD	hyoid	MTL	lateral metatarsus
ATL	atlas	SES	sesamoid
AXI	axis	PH1	1st phalanx
CEV	cervical vertebra (and 3-7)	PH2	2nd phalanx
TRV	thoracic vertebra (and 1-13)	PH3	3rd phalanx
LMV	lumbar vertebra	PHL	lateral phalanx
SAC	sacrum	LBF	long bone
CDV	caudal vertebra	UNI	unidentified
VER	vertebra	0111	
STN	sternum	CLV	clavicle
CC	costal cartilage	COR	coracoid
RIB1	first rib (2 etc)	CMP	carpo-metacarpus
RIB	rib	CMC	carpo-metacarpus
NID	110	WPH1-3	wing phalanges 1-3
URO	urostyle	WPH1-5	wing phalanx
010	uiostyle		lumbosacrale
DENT	dontom	LSA	Tuttioosacrate
DENT	dentary		
CLEI	cleithrum		
RAY	fin ray		
SHELL	shell		
UV	upper valve		
VAL	valve		
	Turty		

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NUMBER: number of fragments in the entry
SIDE: W - whole L - left side R - right side F - fragment
FUSION: records the fused/unfused condition of the epiphyses P - proximal; D - distal; E - acetabulum; N - unfused; F - fused; C - cranial; A - posterior
ZONES: records the part of the bone present. The key to each zone on each bone is on page 4
BUTCHERY: records whether a bone has been chopped (CH), cut (KN), worked (W), burnt (C)

GNAWING: records if a bone has been gnawed by dogs (DG), cats (FEL) or rodents (RG)

TOOTH WEAR - Codes are those used in Grant, A. 1982 The use of tooth wear as a guide to the age of domestic animals, in B.Wilson, C.Grigson and S.Payne (eds) *Ageing and sexing animal bones from Archaeological sites*, 91-108.

Teeth are labelled as follows in the tooth wear column: Deciduous Permanent f ldpm2/dupm2 F lpm2/upm2 g ldpm3/dupm3 G lpm3/upm4 h ldpm4/dupm4 H lpm4/upm4 I lm1/um1

MEASUREMENTS : Any measurements are those listed in A.Von den Driesch (1976) A Guide to the Measurement of Animal Bones from Archaeological Sites, Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA

Some measurments have been taken on juveniles. Measurements marked L1 are the greatest length of long bones lacking one unfused epiphysis – the measurement being taken from the epiphyseal junction. Measurements marked L2 are the greatest length of the long bones between epiphyseal junctions when both epiphyses are unfused.

J lm2/um2 K lm3/um3

PATHOLOGICAL: A 'P' indicates that the bone fragment carries a pathology

COMMENTS: This may include a short description of the fragments, any pathologies, butchery or gnawing evidence

PRESERVATION: records the condition of the bone in the following manner

- 1- enamel only surviving
- 2- bone very severely pitted and thinned, tending to break up; teeth with surface erosion and loss of cementum and dentine
- 3- surface pitting and erosion of bone, some loss of cementum and dentine on teeth
- 4- surface of bone intact, loss of organic component, material chalky, calcined or burnt
- 5- bone in good condition, probably with some organic component

ZONES - codes used to define the zones on each bone

SKULL	1. paraoccipital process	METACARPUS	1. medial facet of proximal articulation, MC3
	2. occipal condyle		2. lateral facet of proximal articulation, MC4
	3. intercornual protuberance		3. medial distal condyle, MC3
	4. external acoustic meatus		4. lateral distal condyle, MC4
	5. frontal sinus		5. anterior distal groove and foramen
	6. ectorbitale		6. medial or lateral distal condyle
	7. entorbitale		
	8. temporal articular facet	FIRST PHALANX	1. proximal epiphysis
	9. facial tuber	THALAINA	2. distal articular facet
	0. infraorbital foramen		
		INNOMINATE	1. tuber coxae
MANDIBLE	1. Symphyseal surface	INNOMINATE	2. tuber sacrale + scar
MANDIDLE	2. diastema		
	3. lateral diastemal foramen		3. body of illium with dorso-medial foramen
			4. iliopubic eminence
	4. coronoid process		5. acetabular fossa
	5. condylar process		6. symphyseal branch of pubis
	6. angle		7. body of ischium
	7. anterior dorsal acsending ramus posterior M3		8. ischial tuberosity
	8. mandibular foramen		9. depression for medial tendon of rectus femoris
VERTEBRA	1. spine	FEMUR	1. head
	2. anterior epiphysis		2. trochanter major
	3. posterior epiphysis		3. trochanter minor
	4. centrum		4. supracondyloid fossa
	5. neural arch		5. distal medial condyle
			6. lateral distal condyle
SCAPULA	1. supraglenoid tubercle		7. distal trochlea
	2. glenoid cavity		8. trochanter tertius
the second second second second	3. origin of the distal spine		
	4. tuber of spine	TIBIA	1. proximal medial condyle
	5. posterior of neck with foramen		2. proximal lateral condyle
	6. cranial angle of blade		3. intercondylar eminence
	7. caudal angle of blade		4. proximal posterior nutrient foramen
			5. medial malleolus
HUMERUS	1. head		6. lateral aspect of distal articulation
	2. greater tubercle		7. distal pre-epiphyseal portion of the diaphysis
	3. lesser tubercle		
	4. intertuberal groove	CALCANEUM	1. calcaneal tuber
	5. deltoid tuberosity		2. sustentaculum tali
	6. dorsal angle of olecranon fossa		3. processus anterior
······································	7. capitulum		
	8. trochlea	METATARSUS	1. medial facet of proximal artciulation, MT3.
	9.		2. lateral facet of proximal articulation, MT4
1	0.		3. medial distal condyle, MT3
RADIUS	1. medial half of proximal epiphysis		4. lateral distal condyle, MT4
1000			
	2. lateral half of proximal epiphysis		5. anterior distal groove and foramen
	3. posterior proximal ulna scar and foramen		6. medial or lateral distal condyle
	4. medial half of distal epiphysis		
	5. lateral half of distal epiphysis		
	 distal shaft immediately above distal epiphysis 		
ULNA	1. olecranon tuberosity		
	2. trochlear notch- semilunaris		
	3. lateral coronoid process		

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Archive Catalogue of Animal Bone from Stephens Way, Sleaford - SWS02

site	context	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preser
SWS02	113	BOS	LI	1	L							Car Martin Martin	WELL WORN	3
SWS02	113	BOS	SCP	1	L	DF	123	SW			SLC-35.5		GELNOID AND NECK-SAWN FROM BLADE	4
SWS02	113	CER	ANT	1	F			W	Spectra and the second seco				WORKED ANTLER BASE WITH INLAID METAL MONOGRAMMED DISC	4
SWS02	113	DAM	TIB	1	R	DF	4567				Bd-34.4 Dd-26.6		DISTAL HALF	4
SWS02	113	SUS	RAD	1	F								MIDSHAFT	4
SWS02	117	BOS	MTT	1	F	an San som mit at nøyr stærmelines til som		enner in mentennen einen sonstannen innersieren mit					SPLIT MIDSHAFT FRAGMENT- 2 PIECES	3
SWS02	117	SSZ	UNI	1	F			KN			an maan ka aana ka ka marka ka mponyo na ka marka ka maa aha aha aha aha ahaa ahaa ahaa		INDET-CUT MARKS	4
SWS02	117	UNI	UNI	1	F				(and (1)) - 12 (1) = 12 (1) (1) (1) (1)				INDET	4
SWS02	137	BOS	MTC	1	L	na mana pangangan kang pang pang pang pang pang pang pang p	12	ani and treff martenation over algorithm attackment) and data	99 Jahan (1999) - Yaga (1998 - 1999) - 1994 (1994	n dans ni oni si saparsi on operante en ancientari i am			PROX END AND SHAFT-BROAD-ROBUST-MALE?- 6 PIECES	4
SWS02	138	BOS	MTC	1	L		2						SPLIT PROX END-POSSIBLY CHOPPED AXIALLY	4
SWS02	138	OVCA	TIB	1	L								DISTAL SHAFT-SMALL	3
SWS02	160	BOS	C23	1	W		1						COMPLETE	3
SWS02	160	BOS	CEV	1	F	CN	15	-					NEURAL ARCH AND PART CENTRUM- 8 PIECES	3
SWS02	160	BOS	INN	1	L								ISCHIAL FRAGMENT OF ACETABULUM	3
SWS02	160	BOS	UM2	1	R					J9				4
SWS02	160	EQU	INN	1	L	EF	3459						ILIUM-ACETAB AND PART ISCHIAL SHAFT- 4 PIECES	4
SWS02	160	EQU	LM	1	R								WELL WORN	4
SWS02	160	EQU	UM	1	R								MED WEAR- 2 PIECES	3
SWS02	160	OVCA	LM3	1	R					K7				4
SWS02	160	OVCA	LM3	1	R					K7			2 PIECES	4
SWS02	160	OVCA	TIB	1	F						n na na na mana na na mana mana na mana mana ma		DISTAL SHAFT-2 PIECES-LAMB	4
SWS02	160	OVCA	TIB	1	L		4						PROX MIDSHAFT- 2 PIECES	4
SWS02	160	SSZ	LBF	3	F		an Baad arrestored arrestore are a browned						SHAFT FRAGMENT	4
SWS02	160	SSZ	LBF	2	F								SHAFT FRAGMENT	4
SWS02	160	UNI	UNI	4	F								INDET	3
SWS02	171	CSZ	LBF	1	F								SHAFT FRAGMENT- 2 PIECES	2
SWS02	172	BOS	LMV	1	F	CFAF	345						FRAGMENTE CENTRUM AND ARCH- 10 PIECES	3
SWS02	180	CSZ	LBF	1	F	1				ан- <u>алы ал</u> ыра 1 ч л.			SHAFT FRAGMENT	3
SWS02	180	EQU	SCP	1	L		1						PROXIMAL BLADE AND SPINE FRAGMENT	4

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site	context	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preser vation
SWS02	186	CSZ	LBF	1	F			and the second second second second second					SHAFT FRAGMENT- 2 PIECES	3
SWS02	186	CSZ	LBF	1	F								SHAFT FRAGMENT	4
SWS02	186	CSZ	UNI	1	F		and a second					of and also have been as a second	INDET-?CEV ZYGA?	3
SWS02	186	OVCA	RAD	1	R				DG				MIDSHAFT-DISTAL CHEWED	3
SWS02	188	CSZ	RIB	1	F				and the second			a na an	PROX SHAFT FRAGMENT	3
SWS02	188	SUS	UM2	1	W					J10				3
SWS02	190	BOS	MTP	1	F		6						PART DISTAL CONDYLE	4
SWS02	190	CSZ	UNI	1	F							1	INDET- 4 PIECES-	3
SWS02	197	BOS	LM	1	F								UNWORN CUSP	3
SWS02	197	EQU	LM	1	R							-	WELL WORN	2
SWS02	197	SUS	SKL	1	R		8		anner serierationalisen einer tean	and and a set of the set	ning (1975) kang salah bergara sala kang saka sang kang salah bergarak salah generak saka di kang sang mangga ka		MEDIAL PART TEMPORAL FACET- 2 PIECES	3
SWS02	203	BOS	CQ	1	F		1						HALF	3
SWS02	203	BOS	HUM	1	R		6						DISTAL POSTERIOR SHAFT	4
SWS02	203	BOS	MAN	1	R		5						CONDYLE	4
SWS02	203	SSZ	TIB	1	F								MIDSHAFT FRAGMENT- 2 PIECES	3
SWS02	203	UNI	LBF	1	F			en forman a d'anna an anna an anna an			landa filo di successo di no di lando con di di danci di dalam di nananany sia any seconda na		SHAFT FRAGMENT	4
SWS02	217	SSZ	LBF	1	F			and a standard standard stranger of the standard stranger stranger stranger stranger stranger stranger stranger	and the second				SHAFT FRAGMENT	4
SWS02	217	UNI	UNI	1	F								INDET	3
SWS02	999	BOS	MTP	1	F	DN	6			and the second			DISTAL CONDYLE	3
SWS02	999	UNI	UNI	1	F				//				INDET- 2 PIECES	3

Appendix 7

PLANT MACROFOSSILS, MOLLUSCS SHELLS AND OTHER REMAINS FROM STEPHEN'S WAY, SLEAFORD (SWS 02): AN ASSESSMENT.

Val Fryer, Church Farm, Sisland, Loddon, Norwich, Norfolk, NR14 6EF September 2002

Introduction

Excavations at Stephen's Way, Sleaford were undertaken by Archaeological Project Services. Samples for the extraction of the plant macrofossil and mollusc assemblages were taken from ditch fills of Iron Age and Romano-British date. Eight samples were submitted for assessment.

Methods

The samples were processed my manual water flotation/washover, collecting the flots in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and mollusc shells noted are listed on Table 1. Botanical nomenclature within the table follows Stace (1997). All plant remains were preserved by charring. Modern contaminants including fibrous roots and seeds/fruits were present in all samples.

The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry for the retrieval of artefacts and ecofacts for further specialist analysis.

Results of assessment Plant macrofossils

Cereal grains/chaff and seeds of common weed species were present at low to moderate densities in four samples. Preservation was generally poor; grains and chaff elements were very fragmentary and a high density of the remaining macrofossils were very abraded.

Cereals and other food plants

Oat (*Avena* sp.) grains were present in sample 7 and wheat (*Triticum* sp.) grains were noted as single specimens in samples 7 and 11. Other remains were extremely rare; a cotyledon fragment of a large pulse (pea/bean) was also found in sample 7, a barley (*Hordeum* sp.) rachis node was recovered from sample 6 and a wheat spikelet base was present in sample 8.

Wild flora

Seeds/fruits of common weed plants were only recorded from sample 7. Segetal taxa were predominant and included orache (*Atriplex* sp.), cabbage/rape (*Brassica* sp.), nipplewort (*Lapsana communis*), medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), small grasses (Poaceae), knotgrass (*Polygonum aviculare*), dock (*Rumex* sp.) and chickweed (*Stellaria media*).

Other plant macrofossils

Charcoal fragments were moderately abundant in all samples. It is possibly of note that some fragments within sample 8 were very rounded and abraded. Other plant macrofossils were rare, but included pieces of charred root, rhizome or stem, mineral replaced root channels and a single bracken (*Pteridium aquilinum*) pinnule fragment.

Other materials

The rare fragments of black porous 'cokey' material and black tarry material may be derived from the combustion of organic materials at very high temperatures. Heavily abraded bone fragments were

common in samples 6, 8 and 9, with burnt fragments being noted in sample 6. Other materials were very rare.

Molluscs

Although specific sieving for the retrieval of molluscan remains was not conducted, shells were common or abundant in all but sample 7. Representative specimens from all four of Evans (1972) ecological groups of terrestrial taxa (i.e. woodland/shade loving species, open country species, catholic species and marsh/freshwater slum species) were noted along with freshwater obligate species. Open country and freshwater obligate taxa were predominant throughout.

Discussion

With the exception of sample 7, the composition of the assemblages from the Iron Age ditch fills (samples 5, 6 and 8) is very uniform, with most material probably being derived from low-density scatters of refuse. Plant macrofossils (excluding charcoal fragments) and other materials are rare, although bone fragments are noted from all four samples. Mollusc shells are also rare, but the taxa present may indicate that the sides of the ditches were dry and possibly covered with short grass while the bases were occasionally/seasonally wet. Sample 7 appears to contain a low-density of burnt refuse, which may include cereal processing debris and/or hearth waste. Mollusc shells and other materials are very rare, and the assemblage is probably derived from a single discreet deposit of detritus within the fill of the ditch.

Samples 9 - 12 are all from ditch fills of Romano-British date. With the exception of a single grain of wheat and some charcoal fragments, charred plant macrofossils are absent. Other materials are extremely rare. However, mollusc shells are abundant. In samples 9 - 11 these appear to indicate that although the ditch sides were still open and grassed, the ditch bases were wetter, probably with some areas of more permanent standing water. The mollusc assemblage from sample 12 contains fewer true freshwater taxa, possibly due to the fact that ditch [175] was situated on elevated ground and, as a result, probably retained less ground water.

Conclusions and recommendations for further work

In summary, with the exception of sample 7, charred plant macrofossils are extremely rare within these assemblages with most probably being derived from wind-blown detritus. Although sample 7 is possibly indicative of the deliberate deposition of refuse within a ditch, these features would appear to be largely peripheral to main centres of domestic and/or industrial activity. The mollusc assemblages show that although the ditches all had grassed banks and were probably sited within open countryside, the volume of water present in the bases of the features may have increased slightly from the Iron Age to the Romano-British period. It is not known whether this is due to site topography or functional change.

As further analysis of these assemblages would not significantly contribute to the overall interpretation of the site or it's component features, no further quantitative work is recommended.

References

Evans, J., 1972

Land Snails in Archaeology. London.

Stace, C., 1997

New Flora of the British Isles. Second edition.

Key to Table

x = 1 - 10 specimens xx = 10 - 100 specimens xxx = 100 + specimens fg = fragment coty = cotyledon b = burnt

Sample No.	5	6	7	8	9	10	11	12
Context No.	180	180	203	172	160	190	160	174
Cereals and other food plants								
Avena sp. (grains)			X					
Cereal indet. (grains)		xfg						
Large Fabaceae indet.			xcotyfg					
Hordeum sp. (rachis node)		x						
Triticum sp. (grains)			x				x	
(spikelet base)				X				
Herbs				A Charles and			Self States	
Atriplex sp.			X					
Brassica sp.			XX					
Chenopodiaceae indet.			X					
Cirsium sp.	1		x					
Lapsana communis L.			x					
Medicago/Trifolium/Lotus sp.								
			X					
Persicaria maculosa/lapathifolia			X					
Small Poaceae indet.			XX					
Polygonum aviculare L.			X					
Rumex sp.			XX	-				
Stellaria media (L.)Vill.			X					
Other plant macrofossils						No. Construction	Sec. Sec.	a series and the
Charcoal <2mm	XX	XX	X	XX	XX	x	x	XX
Charcoal >2mm		XX						x
Charred root/rhizome/stem		X	x					x
Indet.seeds	X	-	X					
Mineral replaced root channels					x		XX	
Pteridium aquilinum (L.)Kuhn (stem frags.)					^			x
Other materials	Statistics and statistics	COLUMN TO BE		and the second			STATE OF STREET, STREE	
	400 96 96 Storig	NON ENGINEERIN	Contract And		Provide the second s			
Black porous 'cokey' material		X	X	X			x	X
Black tarry material					X			
Bone	X	xx xb	X	XX	XX		x	
Burnt/fired clay	X							
Caddis larval cases		x						
Eggshell			X					
Marine mollusc shell frags.		x		X			x	
Mineralised soil concretions				XX	XX		XXXX	
Mineralised/faecal concretions		x						
Ostracods		X		XX	X			X
?Pottery		<u>^</u>		X	~			^
?Slag				x				
Small mammal/amphibian bone		X		X		X		
Small coal frags.	X		X				X	X
Vitrified material	-		X		and the second second second			
Molluscs	and the state of the							
Woodland/shade loving species		a standar i i			State of the State	Maria Maria	Sec. Sec.	The Long to the
Oxychilus sp.		xcf		xcf				
Zonitidae indet.	X							
Open country species								
Candidula intersecta							xcf	
Helicella itala	1			X				
Helicidae indet.	1						x	
Pupilla muscorum	x			x	XX	XX	XX	XX
Vallonia sp.		×		^				XX
V. costata	XX	X			XX	XX	XX	
					X		xcf	XX
V. excentrica	xcf		200				xcf	xcf
V. pulchella	X	X	X	X	XX	X	XX	xcf
Catholic species	out a set of the set	14. 12.16				a second second		Service and
Cochlicopa sp.	X	X	X	X	X	XX	x	X
Limacid plates					X		x	
Nesovitrea hammonis							xcf	
Trichia hispida group	XX	X	x	XX	XX	x	XX	X
T. striolata								xcf
Marsh/freshwater slum species								
Carychium sp.		and the second sec	in the second		-	x	x	
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Table 1. Plant macrofossils, mollusc shells and other remains from Stephen's Way, Sleaford, Lincolnshire.

Appendix 8

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GLOSSARY

Bronze Age	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> Once the fills of these features are removed during an archaeological investigation the original cut is therefore exposed and subsequently recorded.
Dumped deposits	These are deposits, often laid down intentionally, that raise a land surface. They may be the result of casual waste disposal or may be deliberate attempts to raise the ground surface.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) which become contained by the 'cut', are referred to as its fill(s).
Iron Age	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
Layer	A layer is a term to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500-2250 BC.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1^{st} century AD.
Saxon	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany.

Appendix 9

THE ARCHIVE

The archive consists of:

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10 Daily record sheets

- 106 Context record sheets 6 Context Register sheets
- 2 Section record sheets
- 2 Plan record sheets
- 1 Sample record sheet
- 8 Sample sheets
- 3 Photographic record sheets
- 49 Sheets of scale drawings
- 1 Box of finds

All digital archives are stored at APS.

All primary records are currently kept at: Archaeological Project Services, The Old School, Cameron Street, Heckington, Sleaford, Lincolnshire, NG34 9RW

The ultimate destination of the project archive is: Lincolnshire City and County Museum, 12, Friars Lane, Lincoln, LN2 1HQ

The archive will be deposited in accordance with the document titled Conditions for the Acceptance of Project archives, Produced by the Lincolnshire City and County Museum.

Lincolnshire City and County Council Museum Accession Number:	2002.342
Archaeological Project Services Site Code:	SWS02

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology, nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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